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STIC Database Tracking Number: 111587

To: Michael Lavilla	**From:** Beverly Shears
Location: REM 5e79	**Location:** Remsen Bldg. RM 1A54
Art Unit: 1775	**Phone:** 571-272-2528
Wednesday, January 14, 2004	beverly.shears@uspto.gov
Case Serial Number: 09/745441	

Search Notes

sira Search and Information Resources Administration

LaVilla
09/745441


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     FILE 'REGISTRY' ENTERED AT 15:17:54 ON 13 JAN 2004
L1                SCR 1936 ← Group IIa metals
L2   (    297538)SEA FILE=REGISTRY SSS FUL L1                    Str.
L3                STR
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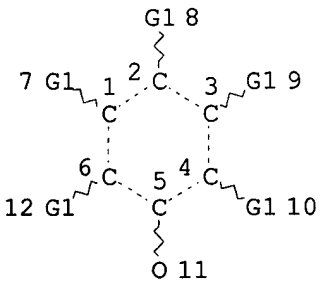

← Aryloxy

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
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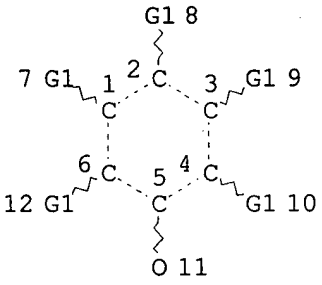


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VAR G1=H/X/AK/CB
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
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L51          101 SEA FILE=REGISTRY ABB=ON  PLU=ON  L50 AND 2/NC ← Limit to two (2) compds.

     FILE 'HCAPLUS' ENTERED AT 15:19:00 ON 13 JAN 2004
L52          411 S L51
L53           57 S L52(L)CAT/RL ← Limit to use as a catalyst

E1 THROUGH E23 ASSIGNED
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L53 ANSWER 1 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:456219 HCAPLUS
DOCUMENT NUMBER: 139:38258
TITLE: Catalytic composition and improved procedure for oligomerization of ethylene, in particular to 1-hexene
INVENTOR(S): Drochon, Sebastien; Guibert, Severine; Saussine, Lucien
PATENT ASSIGNEE(S): Institut Francais Du Petrole, Fr.
SOURCE: Fr. Demande, 13 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

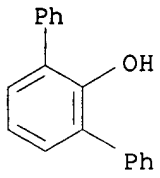
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2833191	A1	20030613	FR 2001-16006	20011210
US 2003130551	A1	20030710	US 2002-309336	20021204
DE 10256926	A1	20030618	DE 2002-10256926	20021205
NL 1022098	A1	20030611	NL 2002-1022098	20021206
CN 1424148	A	20030618	CN 2002-154099	20021210

PRIORITY APPLN. INFO.: FR 2001-16006 A 20011210
OTHER SOURCE(S): MARPAT 139:38258

AB A catalytic composition for the oligomerization of ethylene, in particular to 1-hexene, is obtained by mixing of ≥1 carboxylate of chromium having free carboxylic acid-Cr ratio (1-2.5):1 with (A) ≥1 aryloxy compound of an element M chosen from a group formed by magnesium, calcium, strontium, barium, of general formula: M(RO)2-nXn in which RO is a radical aryloxy containing from 6 to 80 carbon atoms, X is an atom of halogen or a hydrocarbyl radical containing from 1 to 30 atoms of carbon and n is zero or 1 and (B) ≥1 hydrocarbylaluminum compound chosen from hydrocarbylaluminum, chlorinated or brominated hydrocarbylaluminum, and aluminoxanes. This catalyst provides for production of 1-hexene with decreased formation of polymer byproduct.

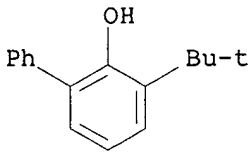
IT **345629-59-6 345629-60-9**, Bis(2-tert-butyl-6-phenylphenoxy)magnesium **540743-45-1**, Bis(2,4-bis-tert-butyl-6-phenylphenoxy)magnesium
RL: **CAT (Catalyst use)**; USES (Uses)
(catalytic composition for trimerization of ethylene to 1-hexene with decreased polymer byproduct)

RN 345629-59-6 HCAPLUS
CN [1,1':3',1''-Terphenyl]-2'-ol, magnesium salt (9CI) (CA INDEX NAME)



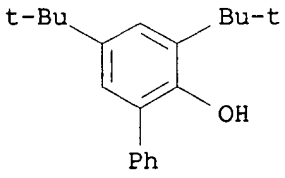
●1/2 Mg

RN 345629-60-9 HCAPLUS
CN [1,1'-Biphenyl]-2-ol, 3-(1,1-dimethylethyl)-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

RN 540743-45-1 HCAPLUS
CN [1,1'-Biphenyl]-2-ol, 3,5-bis(1,1-dimethylethyl)-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 2 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:169992 HCAPLUS
DOCUMENT NUMBER: 138:205482
TITLE: Cyclobutylsilanes for catalysts useful for making highly isotactic olefin polymers
INVENTOR(S): Spencer, Michael D.; Cheng, Chung-Ping
PATENT ASSIGNEE(S): Engelhard Corporation, USA

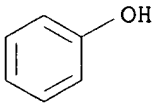
SOURCE: Statutory Invent. Regist., 14 pp.
CODEN: SRXXEV
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2060	H1	20030304	US 2001-915023	20010725

PRIORITY APPLN. INFO.: US 2000-227000P P 20000822
OTHER SOURCE(S): MARPAT 138:205482

AB The catalyst systems comprise a solid Ti catalyst component prepared by contacting a Ti compound and a Mg compound, an organoaluminum compound having ≥1 aluminum-carbon bond, and an organosilicon compound comprising ≥1 cyclobutyl group, such as dicyclobutyldimethoxysilane. A method of making the catalyst systems involves the steps of reacting a Grignard reagent having a cyclobutyl group with an orthosilicate to provide an organosilicon compound having a cyclobutyl moiety, and combining the organosilicon compound with the above organoaluminum compound and the solid Ti catalyst component. Solution polymerization of propylene by the catalyst systems was included.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(Ziegler-Natta polymerization catalysts containing cyclobutylsilanes for preparing highly isotactic polyolefins)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 3 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:928264 HCAPLUS
DOCUMENT NUMBER: 138:14610
TITLE: Process and catalyst system for synthesizing trans-butadiene and butadiene-styrene rubbers with low level of crystallinity useful in tire tread rubber compounds
INVENTOR(S): Halasa, Adel Farhan; Hsu, Wen-liang; Austin, Laurie Elizabeth; Jasiunas, Chad Aaron
PATENT ASSIGNEE(S): The Goodyear Tire & Rubber Company, USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. Ser. No. 730,257.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002183469	A1	20021205	US 2002-178493	20020624
US 6608154	B2	20030819		
US 2002086961	A1	20020704	US 2000-730257	20001205
US 6489415	B2	20021203		

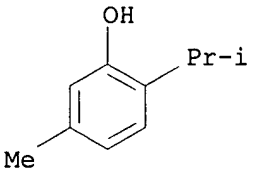
PRIORITY APPLN. INFO.: US 1999-174151P P 19991231
US 2000-730257 A2 20001205

AB The process and catalyst system of this invention can be utilized to synthesize polybutadiene rubber having a high trans content and a low m.p. by solution polymerization The trans-polybutadiene rubber made by the process of this invention can be utilized in tire tread rubbers that exhibit outstanding wear characteristics. More importantly, the trans-polybutadiene rubber of this invention can be easily processed because of its low level of crystallinity. In fact, the trans-polybutadiene made by the process of this invention does not need to be heated in a "hot-house" before being used in making rubber compds. The process and catalyst system of this invention can also be used in the synthesis of trans-styrene-butadiene rubber (SBR). This invention more specifically reveals a process for synthesizing trans-polybutadiene rubber which comprises polymerizing 1,3-butadiene in an organic solvent in the presence of a catalyst system which comprises (a) an organolithium compound, (b) a barium compound selected from the group consisting of (i) barium salts of cyclic alcs., such as barium mentholate, and (ii) barium thymol, and (c) an organoaluminum compound

IT **439910-53-9**, Barium thymolate
RL: **CAT (Catalyst use)**; USES (Uses)
(process and catalyst system for synthesizing trans-butadiene and butadiene-styrene rubbers with low level of crystallinity useful in tire tread rubber compds.)

RN 439910-53-9 HCAPLUS

CN Phenol, 5-methyl-2-(1-methylethyl)-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

L53 ANSWER 4 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:505430 HCAPLUS
DOCUMENT NUMBER: 137:79378
TITLE: Process for synthesizing trans-1,4-polybutadiene
INVENTOR(S): Hsu, Wen-Liang; Halasa, Adel Farhan
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

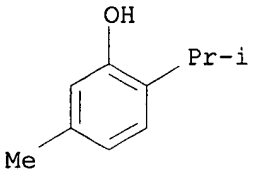
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002086961	A1	20020704	US 2000-730257	20001205
US 6489415	B2	20021203		
US 2002183469	A1	20021205	US 2002-178493	20020624
US 6608154	B2	20030819		
US 2003078351	A1	20030424	US 2002-308253	20021202
US 6670435	B2	20031230		
US 2003134997	A1	20030717	US 2002-329729	20021226
US 6627722	B2	20030930		

PRIORITY APPLN. INFO.: US 1999-174151P P 19991231
US 2000-730257 A2 20001205
US 2002-247243 A3 20020919

AB Process and catalyst system of this invention can be used to synthesize polybutadiene rubber having a high trans content and a low m.p. by solution polymerization The trans-polybutadiene rubber made by the process of this invention can be used in tire tread rubbers that exhibit outstanding wear characteristics. More importantly, the trans-polybutadiene rubber of this invention can be easily processed because of its low level of crystallinity. In fact, the trans-polybutadiene made by the process of this invention does not need to be heated in a hot-house before being used in making rubber compds. This invention more specifically reveals a process for synthesizing trans-polybutadiene rubber which comprises polymerizing 1,3-butadiene in an organic solvent in the presence of a catalyst system which comprises (a) an organolithium compound, (b) a barium compound selected from the group consisting of (i) barium salts of cyclic alcs., such as barium mentholate, and (ii) Ba thymolate, and (c) an organoaluminum compound The trans-polybutadiene made with the catalyst system of this invention typically has a glass transition temperature -97° to -90°., a m.p. -30° to 30°., and a number average mol. weight 50,000-400,000.

IT **439910-53-9**
RL: **CAT (Catalyst use)**; USES (Uses)
(process for synthesizing trans-1,4-polybutadiene)

RN 439910-53-9 HCAPLUS
CN Phenol, 5-methyl-2-(1-methylethyl)-, barium salt (9CI) (CA INDEX NAME)



1/2 Ba

L53 ANSWER 5 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:471993 HCAPLUS
DOCUMENT NUMBER: 135:62984
TITLE: Catalytic composition and process for the oligomerization of ethylene primarily into 1-hexene
INVENTOR(S): Commereuc, Dominique; Drochon, Sebastien; Saussine, Lucien
PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.
SOURCE: Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

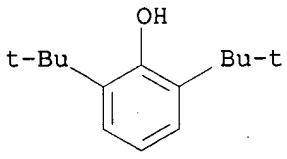
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1110930	A1	20010627	EP 2000-403477	20001211
EP 1110930	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2802833	A1	20010629	FR 1999-16509	19991224
FR 2802833	B1	20020510		
JP 2001219071	A2	20010814	JP 2000-392368	20001225
US 2001023281	A1	20010920	US 2000-745441	20001226
ZA 2001002903	A	20021009	ZA 2001-2903	20010409

PRIORITY APPLN. INFO.: FR 1999-16509 A 19991224
OTHER SOURCE(S): MARPAT 135:62984

AB A catalytic composition for the trimerization of ethylene into 1-hexene comprises: (a) a chromium compound [e.g., chromium tris(2-ethylhexanoate)]; (b) a Group IIA metal (un)substituted aryloxide [e.g., bis(2,6-diphenylphenoxy)magnesium]; and (c) a hydrocarbylaluminum compound (e.g., triethylaluminum) or a bromo- or chlorohydrocarbylaluminum compound, and the aluminoxanes.

IT **57570-79-3 345629-59-6 345629-60-9**
RL: **CAT (Catalyst use)**; USES (Uses)
(in trimerization catalysts containing a hydrocarbylaluminum compound and a chromium compound for the conversion of ethene into 1-hexene)

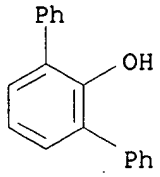
RN 57570-79-3 HCAPLUS
CN Phenol, 2,6-bis(1,1-dimethylethyl)-, magnesium salt (9CI) (CA INDEX NAME)



1/2 Mg

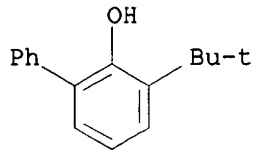
RN 345629-59-6 HCAPLUS

CN [1,1':3',1''-Terphenyl]-2'-ol, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

RN 345629-60-9 HCAPLUS
CN [1,1'-Biphenyl]-2-ol, 3-(1,1-dimethylethyl)-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

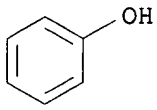
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 6 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:111545 HCAPLUS
DOCUMENT NUMBER: 134:164822
TITLE: Manufacture of polysulfide compounds
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Company, USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6187960	B1	20010213	US 1995-388541	19950214

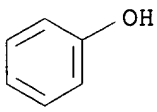
PRIORITY APPLN. INFO.: US 1995-388541 19950214
OTHER SOURCE(S): MARPAT 134:164822
AB The process comprises contacting, in the presence of a catalyst, an organic disulfide with sulfur under conditions sufficient to produce an organic polysulfide with general formula RSnR (R = hydrocarbyl; n = 2-10), wherein the catalyst comprises a base, which is not a

alkylamine, and a surfactant.
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(manufacture of polysulfide compds.)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 7 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:881205 HCAPLUS
DOCUMENT NUMBER: 134:42582
TITLE: Process for preparing polyolefin manufacture catalysts
INVENTOR(S): Choi, Hong-Ki; Yoon, Joo-Kee; Park, Churl-Young; Oh, Jae-Seung
PATENT ASSIGNEE(S): Lg Chemical Ltd., S. Korea
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000075197	A1	20001214	WO 2000-KR580	20000602

W: CN, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

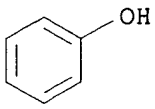
EP 1114070 A1 20010711 EP 2000-937346 20000602
EP 1114070 B1 20031210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2003501522 T2 20030114 JP 2001-502477 20000602
AT 256152 E 20031215 AT 2000-937346 20000602
PRIORITY APPLN. INFO.: KR 1999-20656 A 19990604
KR 2000-7342 A 20000216
WO 2000-KR580 W 20000602

OTHER SOURCE(S): MARPAT 134:42582

AB Polyolefin manufacture catalysts are prepared by forming ppts. from homogeneous solns. of magnesium compds. using magnesium compds. and higher alcs. along with hydrocarbon solvents by adding lower alcs., contacting the ppts. from these solns. with organic aluminum compds. or alkylmagnesium halides and titanium compds., and treating the 2nd ppts. with organic aluminum compds. or electron donor alcs. having 5 or less carbon atoms. Polyolefin manufacture catalysts prepared by the preparation process of the present invention have superior polyolefin manufacture activities, they prepare polymers having high melt flow ratios, and produce a lesser amount of fine particle polymers.

IT **7721-07-5**, Magnesium phenoxide
RL: **CAT (Catalyst use)**; PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(production of polyolefin manufacture catalysts from ppts. from solns. of magnesium compds. in higher alcs. and hydrocarbons)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 8 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:610570 HCAPLUS
DOCUMENT NUMBER: 133:165059
TITLE: Preparation of high-trans SBR using calcium/lithium-based catalysts
INVENTOR(S): Halasa, Adel Farham; Hsu, Wen-Liang; Zuppo, John Robert, III
PATENT ASSIGNEE(S): Goodyear Tire and Rubber Co., USA
SOURCE: Brit. UK Pat. Appl., 35 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

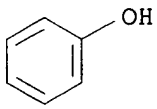
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2342096	A1	20000405	GB 1999-23145	19990930
GB 2342096	B2	20020918		
US 6359088	B1	20020319	US 1999-389507	19990903
BR 9904358	A	20010116	BR 1999-4358	19990923
MX 9908834	A	20000430	MX 1999-8834	19990927
US 2002045720	A1	20020418	US 2001-7474	20011107

PRIORITY APPLN. INFO.: US 1998-102706P P 19981001
US 1999-389507 A3 19990903

AB High-trans SBR diene rubbers useful in tire treads with improved wear characteristics are prepared by solution polymerizing the diene in an organolithium compound, a calcium alkoxide, and a lithium alkoxide. An amine can also be added to the catalyst system to increase the Mooney viscosity/mol. weight of the rubber.

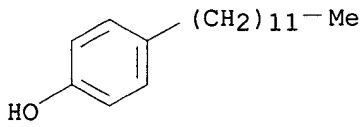
IT **5793-84-0 50910-68-4 100842-25-9**
126755-33-7 132931-21-6
RL: **CAT (Catalyst use)**; USES (Uses)
(high-trans SBR preparation using calcium/lithium-based catalysts)

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



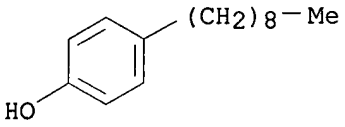
●1/2 Ca

RN 50910-68-4 HCAPLUS
CN Phenol, 4-dodecyl-, calcium salt (9CI) (CA INDEX NAME)



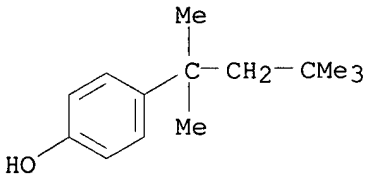
●1/2 Ca

RN 100842-25-9 HCAPLUS
CN Phenol, 4-nonyl-, calcium salt (9CI) (CA INDEX NAME)



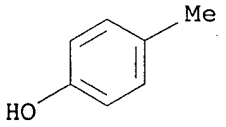
●1/2 Ca

RN 126755-33-7 HCAPLUS
CN Phenol, 4-(1,1,3,3-tetramethylbutyl)-, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

RN 132931-21-6 HCAPLUS
CN Phenol, 4-methyl-, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

L53 ANSWER 9 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:253041 HCAPLUS
DOCUMENT NUMBER: 132:252797
TITLE: Process of the oxidation of mercaptans to disulfides
INVENTOR(S): Matson, Michael S.; Swindell, Harold J.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6051740	A	20000418	US 1998-210034	19981211
WO 2000034235	A1	20000615	WO 1999-US29408	19991210
W: RU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1137630	A1	20011004	EP 1999-967269	19991210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

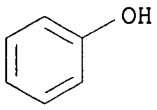
PRIORITY APPLN. INFO.: US 1998-210034 A 19981211
WO 1999-US29408 W 19991210

OTHER SOURCE(S): MARPAT 132:252797

AB The title process comprises contacting a mercaptan (e.g., MeSH) in the presence of an oxygen-containing fluid, a catalyst (e.g., NaOH), optionally a cocatalyst (e.g., a transition metal compound), and further optionally a solvent or a surfactant or combination of a solvent and surfactant under a condition sufficient to oxidize the mercaptan to an organic disulfide (e.g., di-Me disulfide).

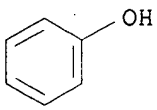
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(process of the oxidation of mercaptans to disulfides)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 10 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:253040 HCAPLUS
DOCUMENT NUMBER: 132:252796
TITLE: Process for producing organic polysulfides by the reaction of thiols with sulfur in the presence of a catalyst and then contacting the reaction medium with carbon dioxide
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6051739	A	20000418	US 1999-236976	19990126
WO 2000043359	A1	20000727	WO 2000-US1453	20000121
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000024167	A1	20000807	AU 2000-24167	20000121
EP 1149071	A1	20011031	EP 2000-902457	20000121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002535306	T2	20021022	JP 2000-594776	20000121

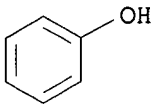
PRIORITY APPLN. INFO.: US 1999-236976 A1 19990126
WO 2000-US1453 W 20000121

OTHER SOURCE(S): MARPAT 132:252796

AB A process for producing organic polysulfides (e.g., di-tert-Bu trisulfide) comprises contacting, in the presence of a catalyst (e.g., sodium hydroxide), a mercaptan (e.g., tert-Bu mercaptan) with elemental sulfur to produce a product medium and then contacting it with carbon dioxide or a carbon dioxide-generating compound The catalyst comprises a base and, optionally, a surfactant, and the organic polysulfides contain ≥3 sulfur atoms per mol.

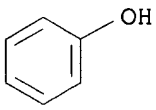
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(process for producing organic polysulfides by the reaction of thiols with sulfur in the presence of a catalyst and then contacting the reaction medium with carbon dioxide)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 11 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:227371 HCAPLUS
DOCUMENT NUMBER: 132:252303
TITLE: Calcium alkoxide-based catalyst system and preparation of high trans low vinyl random SBR
INVENTOR(S): Halasa, Adel Farhan; Hsu, Wen-Liang; Zuppo, John Robert, III
PATENT ASSIGNEE(S): Goodyear Tire and Rubber Company, USA
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

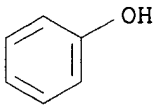
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 990670	A1	20000405	EP 1999-118676	19990922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6359088	B1	20020319	US 1999-389507	19990903
BR 9904358	A	20010116	BR 1999-4358	19990923
MX 9908834	A	20000430	MX 1999-8834	19990927
US 2002045720	A1	20020418	US 2001-7474	20011107
PRIORITY APPLN. INFO.:			US 1998-102706P P	19981001
			US 1999-389507 A3	19990903

AB The title catalyst system can be used to synthesize a highly random high trans content low vinyl content styrene-butadiene rubber used in tire tread rubbers that exhibit improved wear characteristics.

This catalyst system for use in isothermal polymns. consists essentially of (a) an organolithium compound, (b) a Ca alkoxide and (c) a Li alkoxide. SBR (30:70), prepared in the presence of lithium tert-butoxide, n-BuLi, and Ca tetrahydrofurfuryl alcoholate, in hexane, had vinyl content 20%, glass transition temperature -54°, and random styrene sequences. An amine can also be added to the catalyst system to increase the mol. weight (Mooney viscosity) of the rubber.

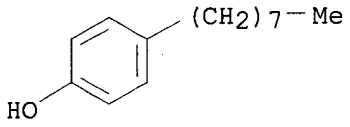
IT **5793-84-0**, Calcium diphenoxide **32666-20-9**
50910-68-4 100842-25-9 132931-21-6
RL: **CAT (Catalyst use)**; USES (Uses)
(calcium alkoxide-based catalyst system for preparation of high trans low vinyl random SBR)

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



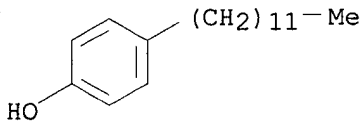
●1/2 Ca

RN 32666-20-9 HCAPLUS
CN Phenol, 4-octyl-, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

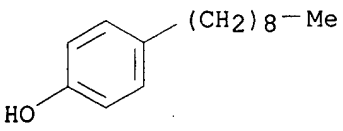
RN 50910-68-4 HCAPLUS
CN Phenol, 4-dodecyl-, calcium salt (9CI) (CA INDEX NAME)



1/2 Ca

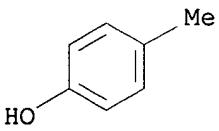
RN 100842-25-9 HCAPLUS

CN Phenol, 4-nonyl-, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

RN 132931-21-6 HCAPLUS
CN Phenol, 4-methyl-, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 12 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:140806 HCAPLUS
DOCUMENT NUMBER: 132:152927
TITLE: Preparation of poly(olefin butanedioic acid) polyol ester non-ash dispersant for lubricants and fuels
INVENTOR(S): Zhang, Shaoming; Song, Xuemin
PATENT ASSIGNEE(S): Lanzhou Refinery General Plant, China Petrochemical Co., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1186078	A	19980701	CN 1996-114272	19961225
CN 1045107	B	19990915		

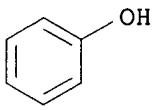
PRIORITY APPLN. INFO.: CN 1996-114272 19961225

AB Title dispersant is prepared by esterifying C5-500 poly(olefin butanedioic acid) with C2-40 polyol in the presence of alkali metal salt as catalyst at 150°-300° for 6-50 h. Thus

poly(isobutene butanedioic anhydride) 1000 and mineral oil 1000 were reacted with pentaerythritol 85 parts at 170°, followed by adding calcium petroleum sulfonate 30 parts in 2 h to basic value 400 mg KOH/g, then stirring-reacting at 190° for 10 h, decreasing the temperature to 140°, filtering to give the product having colloidal matter 0.1%, and filtering rate 40 Kg/m2·h (industrial filter paper).

IT **7721-07-5D**, Phenol magnesium salt, alkyl derivs., sulfided
RL: **CAT (Catalyst use)**; USES (Uses)
(catalyst; preparation of poly(olefin butanedioic acid) polyol ester non-ash dispersant for lubricants and fuels)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 13 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:343337 HCAPLUS
DOCUMENT NUMBER: 130:339699
TITLE: Process and catalysts for producing organic trisulfides from the reaction of mercaptans with organic polysulfides
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5907064	A	19990525	US 1998-81111	19980519
WO 9959965	A1	19991125	WO 1999-US9739	19990504
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9937852	A1	19991206	AU 1999-37852	19990504
EP 1080071	A1	20010307	EP 1999-920330	19990504
R: BE, FR				

PRIORITY APPLN. INFO.: US 1998-81111 A1 19980519

WO 1999-US9739 W 19990504

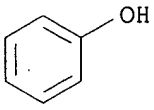
OTHER SOURCE(S): MARPAT 130:339699

AB Organic trisulfides (e.g., di-tert-Bu trisulfide), useful as chemical and petrochem. intermediates (no data), are prepared in high yield and selectivity by reacting a mercaptan (e.g., tert-Bu mercaptan) with an organic polysulfide compound containing >3 S atoms (e.g., di-tert-Bu polysulfides) in the presence of a catalyst system comprising a base (e.g., NaOH) and a surfactant (e.g., Tergitol 15-S-7; ethoxylated alkanols) to produce a product mixture and optionally contacting the product mixture with an acid (e.g., sulfuric acid).

IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(process and catalysts for producing organic trisulfides from the reaction of mercaptans with organic polysulfides)

RN 2678-41-3 HCAPLUS

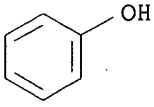
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS

CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 14 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:742180 HCAPLUS

DOCUMENT NUMBER: 130:4732

TITLE: Random trans SBR with low vinyl microstructure and catalyst for SBR manufacture

INVENTOR(S): Halasa, Adel Farhan; Hsu, Wen-Liang; Austin, Laurie Elizabeth

PATENT ASSIGNEE(S): Goodyear Tire and Rubber Company, USA

SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

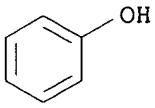
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 877034	A1	19981111	EP 1998-107597	19980427
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9801503	A	19991221	BR 1998-1503	19980428
US 6103842	A	20000815	US 1998-72492	19980504

PRIORITY APPLN. INFO.: US 1997-45586P P 19970505

AB The solution styrene-butadiene rubber can be used in tire tread rubbers that exhibit improved wear characteristics. A catalyst system for use in isothermal polymns. consists essentially of (a) an organolithium compound, (b) a Ba alkoxide and (c) a Li alkoxide. SBR (50:50), prepared in the presence of BuLi, Ba 2-ethylhexoxide, and Li -tert-butoxide, had vinyl content 6%, glass transition temperature -29°, and Mooney viscosity 34.

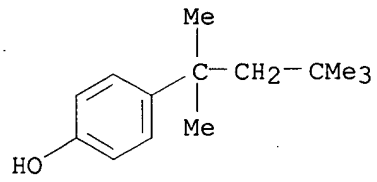
IT **2678-41-3**, Barium diphenoxide **28675-72-1**
41157-58-8 133208-60-3 133208-63-6
RL: **CAT (Catalyst use)**; USES (Uses)
(random SBR with high trans, low vinyl microstructure for)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



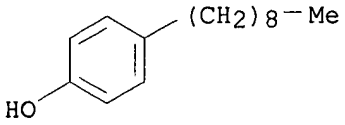
●1/2 Ba

RN 28675-72-1 HCAPLUS
CN Phenol, 4-(1,1,3,3-tetramethylbutyl)-, barium salt (9CI) (CA INDEX NAME)



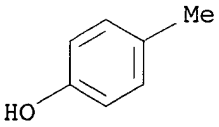
●1/2 Ba

RN 41157-58-8 HCAPLUS
CN Phenol, 4-nonyl-, barium salt (9CI) (CA INDEX NAME)



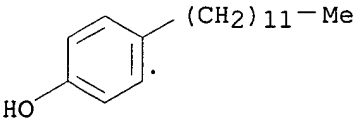
●1/2 Ba

RN 133208-60-3 HCAPLUS
CN Phenol, 4-methyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

RN 133208-63-6 HCAPLUS
CN Phenol, 4-dodecyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 15 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:244317 HCAPLUS
DOCUMENT NUMBER: 126:225021
TITLE: Manufacture of organic disulfides
INVENTOR(S): Pauwels, Alex; Stinn, Dean Eugene
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: Neth. Appl., 22 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

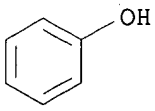
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 1003286	A1	19961209	NL 1996-1003286	19960606
NL 1003286	C2	19980519		
US 5659086	A	19970819	US 1995-467502	19950606
BE 1010557	A5	19981006	BE 1996-501	19960605

PRIORITY APPLN. INFO.: US 1995-467502 19950606

AB The title process comprises treating a mercaptan with a base to form a salt solution, treating this solution with more mercaptan and H2O2 to form an organic and an aqueous phase, separating the organic phase from the aqueous phase and recovering the organic phase. Thus, EtSH and H2O2 were added to aqueous NaOH, followed by repeated addition of EtSH and H2O2. The aqueous and organic phases are then allowed to sep. to give Et2S2 nearly quant.

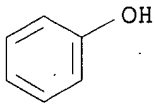
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(manufacture of disulfides from mercaptans in presence of base)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

L53 ANSWER 16 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:637695 HCAPLUS
DOCUMENT NUMBER: 125:329817
TITLE: Polymerization of dimercaptans with elemental sulfur in manufacture of polysulfides
INVENTOR(S): Efner, Howard F.; Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

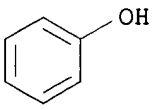
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5565517	A	19961015	US 1994-340576	19941116

PRIORITY APPLN. INFO.: US 1994-340576 19941116
OTHER SOURCE(S): MARPAT 125:329817

AB Organic polysulfide polymers are manufactured by contacting a dimercaptan with elemental sulfur in the presence of a basic catalyst and an alkoxylated compound under conditions sufficient to synthesize an organic polysulfide, wherein said dimercaptan, said basic catalyst, and elemental S are each present in an effective amount to effect the production of an organic polysulfide, and said alkoxylated compound is selected from the group consisting of alkoxylated alcs., alkoxylated mercaptans, and combinations of any two or more thereof. Mol. weight may be controlled by addition of a mercaptan. The reaction is not exothermic, and the dimercaptan is oxidized by S without introducing air or O to the system. Thus, 1,2-ethanethiol was polymerized with elemental S in the presence of triethylamine to give a polyethylene sulfide having an average of 3 sulfurs per repeating unit.

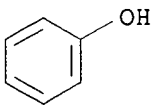
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(manufacture of polysulfides via direct polymerization of elemental sulfur
with dithiols)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



1/2 Ca

L53 ANSWER 17 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:447113 HCAPLUS
DOCUMENT NUMBER: 125:142116
TITLE: Process for producing organic polysulfide compounds
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

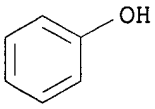
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5530163	A	19960625	US 1995-377064	19950123
JP 08231496	A2	19960910	JP 1996-7930	19960122
BE 1010101	A5	19971202	BE 1996-55	19960122
FR 2729663	A1	19960726	FR 1996-705	19960123
FR 2729663	B1	19980213		

PRIORITY APPLN. INFO.: US 1995-377064 19950123

AB The process comprises contacting, in the presence of a catalyst, a mercaptan with sulfur under conditions sufficient to produce an organic polysulfide and thereafter, the resulting reaction medium is contacted with an acid to produce an acid-treated organic polysulfide wherein the mercaptan, sulfur and catalyst are each present in an amount effective to produce an organic polysulfide. The acid-treated organic polysulfide can be purified and recovered.

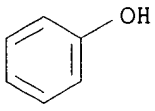
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(manufacture of organic polysulfides by catalytic reaction of mercaptans and sulfur and purification by acid treatment)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)

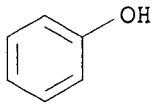


●1/2 Ca

L53 ANSWER 18 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:982677 HCAPLUS
DOCUMENT NUMBER: 124:88264
TITLE: Oxidation of dimercaptans to organic disulfide polymers using sulfur
INVENTOR(S): Shaw, James E.; Sattich, William E.; Efner, Howard F.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5464931	A	19951107	US 1994-290666	19940815
US 5545714	A	19960813	US 1995-450828	19950525

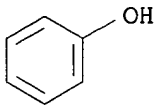
PRIORITY APPLN. INFO.: US 1994-290666 19940815
OTHER SOURCE(S): MARPAT 124:88264
AB Organic disulfide polymers such as polyethylene disulfide which is used in batteries are prepared by contacting a dimercaptan such as 1,2-ethanedithiol with elemental sulfur using a mixture of a basic compound such as NaOH and an ethoxylated alc. such as TERGITOL 15-S-7 as catalyst wherein the dimercaptan is present in excess amount to effect the preparation of the disulfide polymer.
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(oxidation of dimercaptans to organic disulfide polymers using sulfur)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



1/2 Ba

RN 5793-84-0 HCAPLUS

CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

L53 ANSWER 19 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:403624 HCAPLUS
DOCUMENT NUMBER: 123:33850
TITLE: Manufacture of olefins by pyrolysis of pitch
INVENTOR(S): Yasuda, Hajime; Tamai, Hisashi; Sawada, Goro
PATENT ASSIGNEE(S): Maruzen Oil Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

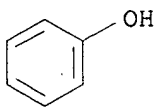
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06346060	A2	19941220	JP 1993-166156	19930611

PRIORITY APPLN. INFO.: JP 1993-166156 19930611

AB Olefins are manufactured by pyrolysis of pitch using Ca compds., transition metals and/or their compds. as catalysts. Thus, pitch was decomposed at 700° in the presence of 1 mmol/g CaI2 and 1 mmol/g Ni(C5H5)2 to give a product containing 15.8% ethylene and propylene with 34.8% conversion.

IT **5793-84-0**
RL: **CAT (Catalyst use)**; USES (Uses)
(manufacture of olefins by pyrolysis of pitch with calcium compds. and transition metals)

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



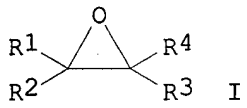
●1/2 Ca

L53 ANSWER 20 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:322746 HCAPLUS
DOCUMENT NUMBER: 120:322746

TITLE: Process and catalyst for producing epoxide-derived thioester alcohols
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5283368	A	19940201	US 1993-6278	19930119
CA 2112327	AA	19940720	CA 1993-2112327	19931223
CA 2112327	C	19971209		
JP 06256297	A2	19940913	JP 1994-2637	19940114
EP 607916	A1	19940727	EP 1994-100640	19940118
EP 607916	B1	19970604		
R: BE, DE, FR, GB, NL				
BR 9400132	A	19940809	BR 1994-132	19940118

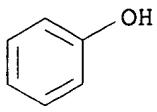
PRIORITY APPLN. INFO.: US 1993-6278 19930119
OTHER SOURCE(S): CASREACT 120:322746; MARPAT 120:322746
GI



I

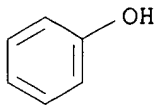
AB The title compds. RS[C(R1)R2C(R3)R4O]nH (R, R1-R4 = H, C1-20 hydrocarbyl; n = 1-20) are prepared in high yield and selectivity by alkoxylating mercaptans RSH with an epoxide I in the presence of a catalyst which comprises a base and an alkoxylated alc. Use of this novel catalyst allows increased reaction control and minimizes reaction runaway. Thus, n-octyl mercaptan monopropoxylate was prepared in 99% yield by the reaction of n-octyl mercaptan and propylene oxide in the presence of a catalyst prepared from aqueous NaOH and Tergitol 15 S7.

IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, containing alkoxylated alcs., for preparation of thioether alcs. from mercaptans and epoxides)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

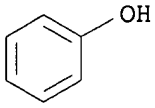
L53 ANSWER 21 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:628505 HCAPLUS
DOCUMENT NUMBER: 119:228505
TITLE: Stabilized and deodorized polysulfides and process for their preparation
INVENTOR(S): Shaw, James E.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 833,264, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5218147	A	19930608	US 1992-875489	19920429
JP 05271413	A2	19931019	JP 1993-18868	19930205
EP 555809	A1	19930818	EP 1993-101977	19930209
EP 555809	B1	19960117		

R: BE, FR, NL

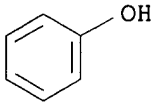
PRIORITY APPLN. INFO.: US 1992-833264 19920210
US 1992-875489 19920429
OTHER SOURCE(S): MARPAT 119:228505
AB Polysulfides useful as additives for elastomers, antioxidants for lubricating oils, etc., are stabilized and deodorized by treatment with alkylene oxides in the presence of tetraalkylammonium hydroxide or inorg. base catalysts at 50-150°.
IT **2678-41-3**, Barium phenoxide **5793-84-0**, Calcium phenoxide
RL: **CAT (Catalyst use)**; USES (Uses)

(catalyst, for deodorization and stabilization of polysulfides with alkylene oxides)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

L53 ANSWER 22 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:450098 HCAPLUS
DOCUMENT NUMBER: 119:50098
TITLE: Olefin polymerization catalyst for blow moldable product
INVENTOR(S): Suga, Yoshinori; Enokido, Nobuo
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 525608	A2	19930203	EP 1992-112505	19920722
EP 525608	A3	19930317		
EP 525608	B1	19951011		
R: DE, FR, GB, NL				
JP 05230136	A2	19930907	JP 1992-173153	19920630
JP 3311780	B2	20020805		
BR 9202790	A	19930323	BR 1992-2790	19920721
US 5576400	A	19961119	US 1993-100183	19930802

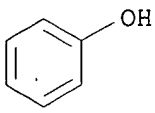
PRIORITY APPLN. INFO.:
JP 1991-182676 A 19910723
JP 1992-173153 A 19920630
US 1992-916608 B1 19920722

Searcher : Shears 308-4994

AB The title polyolefin having broad mol. weight distribution, high melt tension, high melt elasticity, and no fish eyes is prepared using as catalyst a combination of (A) hydrocarbon-insol. solid component of organomagnesium, organotitanium, and polyalkyltitanate with halogenating agent and (B) an organoaluminum cocatalyst. C2H4 was polymerized under H partial pressure 2.5 kg/cm2 at 85° in the presence of solid component reaction product of Mg(OEt)2, Ti(OBu)4, tetrabutoxytitanium tetramer, and TiCl4 and AlEt3 cocatalyst to give polyethylene having melt index 0.15 g/10 min, melt tension 11.5 g, die swell ratio 4.1, and no fish eyes.

IT **7721-07-5**, Diphenoxymagnesium
RL: **CAT (Catalyst use)**; USES (Uses)
(catalyst containing, for olefin polymerization for blow moldable product)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



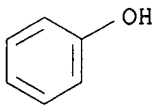
●1/2 Mg

L53 ANSWER 23 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:168766 HCAPLUS
DOCUMENT NUMBER: 118:168766
TITLE: Specific catalytic properties of monomeric and oligomeric metal phenoxides
AUTHOR(S): Perchenko, V. N.; Abubakirov, R. Sh.; Kurashev, M. V.; Semenov, O. B.; Khrapova, I. M.; Plate, N. A.
CORPORATE SOURCE: Inst. Neftekhim. Sint., Moscow, Russia
SOURCE: Doklady Akademii Nauk (1992), 326(2), 276-8 [Chem.]
CODEN: DAKNEQ; ISSN: 0869-5652
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Alkylation of phenol by styrene catalyzed by R(OPh)3 (R = Al, B), R(OPh)2 (R = Mg, Ca), (PhO)2AlOAl(OPh)2, (PhO)2AlOMgOPh, and [(PhO)2Al(OAlOPh)nOAl(OPh)2 n = 5-28], gave, depending on the catalyst, 3-99% alkylphenol and 1-98% oligoalkylphenol. Thus, alkylation catalyzed by Al(OPh)3 at 140° gave 97-99% o-PhCHMeC6H4OH (I) and 1-3% oligoalkylphenol; alkylation catalyzed by Ca(OPh)3 gave 97-98% oligoalkylphenol (mol. weight 76000-78200) and 2-3% I.

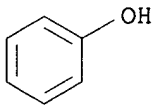
IT **5793-84-0**, Calcium diphenoxide **7721-07-5**, Diphenoxymagnesium
RL: **CAT (Catalyst use)**; USES (Uses)
(catalyst, for alkylation of phenol by styrene)

RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 24 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:561023 HCAPLUS
DOCUMENT NUMBER: 115:161023
TITLE: Manufacture of conjugated diene rubbers
INVENTOR(S): Katsumata, Hideo; Takashima, Akio; Hatsutori, Iwakazu
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

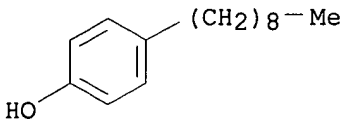
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03088805	A2	19910415	JP 1989-224708	19890901

PRIORITY APPLN. INFO.: JP 1989-224708 19890901
OTHER SOURCE(S): MARPAT 115:161023

AB Title rubbers of trans-1,4-configuration are manufactured by polymerizing monomers mainly consisting of conjugated dienes in an inert organic solvent in the presence of a catalyst composition of a Ba compound, an organoaluminum compound, an organomagnesium compound, and ROH (R = C4-20 alkyl, C6-20 aryl, O- and/or N-containing hydrocarbyl). Thus, 1,3-butadiene was polymerized in cyclohexane at 70° in the presence of an aged 1:1.5:4:2 mixture of Ba di(p-nonylphenoxide), Et3Al, BuEtMg, and diethylaminoethanol (I) to give polybutadiene with Mooney viscosity 35, microstructure of 87% trans-1,4, 9% cis-1,4, and 4% 1,2 or 3,4, weight-average mol. weight 32.8 + 104, and mol. weight distribution 1.6 in 95% yield while the yield dropped to 3% when polymerized over a catalyst composition without I.

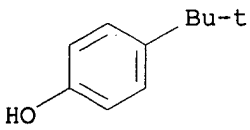
IT **41157-58-8 41157-60-2**

RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, containing aluminum and magnesium compds. and alcs., for conjugated dienes, for manufacture of rubbers of trans-1,4-configuration)
RN 41157-58-8 HCAPLUS
CN Phenol, 4-nonyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

RN 41157-60-2 HCAPLUS
CN Phenol, 4-(1,1-dimethylethyl)-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

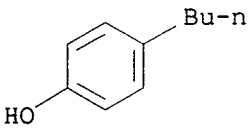
L53 ANSWER 25 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:538028 HCAPLUS
DOCUMENT NUMBER: 115:138028
TITLE: Manufacture of conjugated diene polymer rubbers
INVENTOR(S): Katsumata, Hideo; Takashima, Akio; Hatsutori, Iwakazu
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03100003	A2	19910425	JP 1989-235742	19890913

PRIORITY APPLN. INFO.: JP 1989-235742 19890913
OTHER SOURCE(S): MARPAT 115:138028
AB Conjugated diene polymer rubbers of high mol. weight with predominantly trans-1,4 bonds are manufactured by polymerizing monomers mainly comprising conjugated dienes in inert organic solvents in the presence of catalyst compns. containing Ba compds., organic Al compds., organic Li compds., and

NHR1R2 (R1, R2 = C1-20 alkyl, C6-20 aryl, C3-20 alkylsilyl), R3R4NR7NR5R6 (R3-R6 = C1-20 alkyl, C6-20 aryl, C3-20 alkylsilyl; R7 = C1-20 alkylene, C6-20 arylene), and/or Al(OR8)n(R9)3-n (R8 = C1-20 alkyl, C6-20 aryl, O- and/or N-containing hydrocarbyl; R9 = C1-20 alkyl, C6-20 aryl; n = 1-3). Thus, Ba bis(p-nonylphenoxide), N,N,N',N'-tetramethylethylenediamine, Et3Al, and BuLi were mixed at 1:1:4:5 in that order, then heated at 80° for 15 min to give a catalyst composition Then, 25 g 1,3-butadiene was polymerized in 175 g cyclohexane in the presence of the catalyst composition at 70° for 90 min, and the product was mixed with di-tert-butyl-p-cresol, coagulated with MeOH, then dried at 40° under reduced pressure to give polybutadiene with Mooney viscosity 35, number-average mol. weight (Mn) 29.6 + 104, and Mw/Mn = 1.5 (Mw = weight-average mol. weight) containing trans-1,4 bonds 87, cis-1,4 bonds 8, and vinyl groups 5% in 98% yield.

IT **133208-61-4**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of conjugated dienes, trans diene
rubbers from)
RN 133208-61-4 HCAPLUS
CN Phenol, 4-butyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

L53 ANSWER 26 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:166109 HCAPLUS
DOCUMENT NUMBER: 114:166109
TITLE: Producing high-trans, low-vinyl conjugated diene (co)polymer
INVENTOR(S): Takashima, Akio; Hattori, Iwakazu; Imamura, Takashi
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

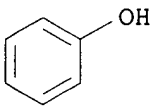
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 391692	A1	19901010	EP 1990-303620	19900404
EP 391692	B1	19940105		
R: DE, FR, GB, IT, NL				
JP 02265902	A2	19901030	JP 1989-86720	19890407
JP 2730163	B2	19980325		

US 5086136 A 19920204 US 1990-502172 19900330
PRIORITY APPLN. INFO.: JP 1989-86720 19890407
OTHER SOURCE(S): MARPAT 114:166109

AB The title polymers are prepared with a high mol.-weight at a high polymerization activity by a catalyst composition containing Ba compds., organoaluminum compds., organolithium compds., OH-containing organic compds. Thus, adding diethylaminoethanol 0.24, AlEt3 0.48, and BuLi 0.6 mmol resp., to 0.12 mmol dinonylphenoxybarium, heating at 80° for 15 min, and polymerizing 25 g butadiene in 175 g cyclohexane by above catalyst composition at 70° for 90 min gave rubber with weight-average mol.-weight 383,000, Mooney viscosity 59 ML1+4 at 100° and having trans-1,4, cis-1,4, and vinyl content 87, 9, and 4, resp.

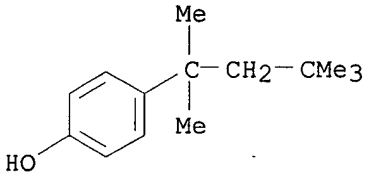
IT **2678-41-3**, Barium diphenoxide **28675-72-1**
41157-58-8 58973-87-8 133208-60-3
133208-61-4 133208-63-6
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of conjugated dienes)

RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



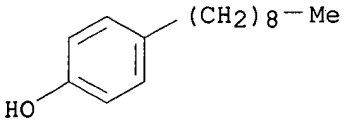
●1/2 Ba

RN 28675-72-1 HCAPLUS
CN Phenol, 4-(1,1,3,3-tetramethylbutyl)-, barium salt (9CI) (CA INDEX NAME)



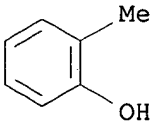
●1/2 Ba

RN 41157-58-8 HCAPLUS
CN Phenol, 4-nonyl-, barium salt (9CI) (CA INDEX NAME)



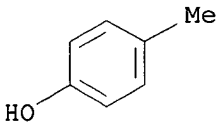
●1/2 Ba

RN 58973-87-8 HCAPLUS
CN Phenol, 2-methyl-, barium salt (9CI) (CA INDEX NAME)



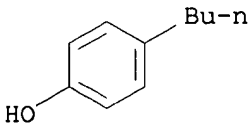
●1/2 Ba

RN 133208-60-3 HCAPLUS
CN Phenol, 4-methyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

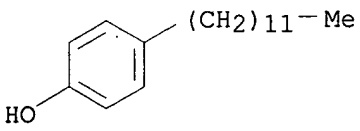
RN 133208-61-4 HCAPLUS
CN Phenol, 4-butyl-, barium salt (9CI) (CA INDEX NAME)



1/2 Ba

RN 133208-63-6 HCAPLUS

CN Phenol, 4-dodecyl-, barium salt (9CI) (CA INDEX NAME)

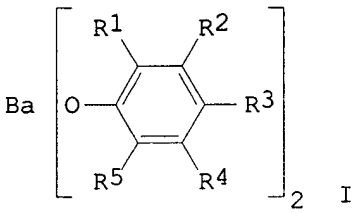


●1/2 Ba

L53 ANSWER 27 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:99511 HCAPLUS
DOCUMENT NUMBER: 112:99511
TITLE: Manufacture of conjugated diene polymers
INVENTOR(S): Shimada, Noboru; Hattori, Iwakazu; Oshima, Noboru; Sakakibara, Mitsuhiko
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01234409	A2	19890919	JP 1988-60210	19880316
JP 2518005	B2	19960724		

PRIORITY APPLN. INFO.: JP 1988-60210 19880316
GI



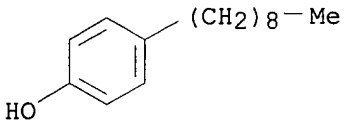
I

AB Conjugated diene polymers are manufactured by polymerizing monomers mainly comprising conjugated dienes in inert organic solvents in the presence of catalyst compns. comprising Ba compds., e.g., I (R1-R5 = C1-20 hydrocarbyl, alkoxy, phenoxy derivative) (A), organic Al compds., organic Mg compds., and organic Li alkoxides and/or organic Li amides (B) at mol ratio B/A = 0.5-3. Thus, 500 g 1,3-butadiene was polymerized in cyclohexane in the presence of I (R1 = R2 = R4 = R5 = H, R3 = nonyl) 1.16, Et3Al 1.16, Bu2Mg 5.80, and tetrahydrofurfuryloxylithium 1.74 mmol at 70° for 60 min to give a polymer, 100 g of which was mixed with 0.7 g di-tert-butyl-p-cresol, and roll-dried at

110° to give a polymer containing 87% trans-1,4 structure and 9% cis-1,4 structure in 80% conversion.

IT **41157-58-8**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for manufacture of conjugated diene polymer rubbers)

RN 41157-58-8 HCAPLUS
CN Phenol, 4-nonyl-, barium salt (9CI) (CA INDEX NAME)



●1/2 Ba

L53 ANSWER 28 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:511093 HCAPLUS
DOCUMENT NUMBER: 109:111093
TITLE: Manufacture of polyolefins
INVENTOR(S): Suga, Sadanori; Tanaka, Eiji; Maruyama, Yasuo; Isobe, Eiji
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63069805	A2	19880329	JP 1986-214867	19860911
JP 07088405	B4	19950927		

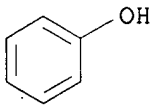
PRIORITY APPLN. INFO.: JP 1986-214867 19860911
OTHER SOURCE(S): MARPAT 109:111093

AB Polyolefins are prepared at high catalytic activity with stereoregularity by using catalysts composed of (A) solid component containing Mg, Ti, halo, and electron donor, (B) organometallic compds. of groups IA, IIA, and IIIA metals, and (C) R1nAl(OSiR23)3-n (R1 = alkyl; R2 = alkyl, aryl; 0≤ n <3). Thus, Mg(OPh)2 5, Si(OPh)4 4.8, BzOEt 0.7, and TiCl4 45 g were stirred at 80° to give a solid product, which was treated with 0.7 g BzOEt and 45 g TiCl4 to give a catalyst containing 2.7% Ti. Propylene was polymerized in the presence of 0.9 mmol Et3Al, 0.1 mmol Al(OSiPh3)3, 0.2 mmol Me anisate, and 10 mg catalyst under pressurized H at 70° to give a white polypropylene at catalytic activity of 39 kg/g-catalyst.

IT **7721-07-5**, Diphenoxymagnesium
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for olefin polymerization)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 29 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:553691 HCAPLUS
DOCUMENT NUMBER: 105:153691
TITLE: Catalyst component for olefin polymerization
INVENTOR(S): Tachikawa, Mamoru; Sakuma, Masato; Ueki, Satoshi; Imai, Chihiro; Makishima, Tokuo
PATENT ASSIGNEE(S): Toa Nenryo Kogyo K. K., Japan
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

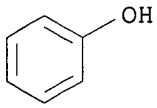
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 184347	A2	19860611	EP 1985-308320	19851114
EP 184347	A3	19870107		
EP 184347	B1	19901227		
R: BE, DE, FR, GB, IT, NL, SE				
JP 61130312	A2	19860618	JP 1984-251741	19841130
JP 06074292	B4	19940921		
US 4686199	A	19870811	US 1985-802660	19851127
AU 8550590	A1	19860605	AU 1985-50590	19851129
AU 584030	B2	19890511		
CA 1257862	A1	19890725	CA 1985-496535	19851129
US 4849483	A	19890718	US 1987-39496	19870416
PRIORITY APPLN. INFO.:			JP 1984-251741	19841130
			US 1985-802660	19851127

AB A catalyst component for the polymerization of olefins is prepared by contacting a Group II-IV metal oxide with a magnesium bis(hydrocarbyloxide), then with a halogen-containing compound and subsequently with a Ti compound Thus, 9.3 g SiO2 (obtained by calcining G-952 with sp. surface area 302 m2/g, pore volume 1.54 cm3/g) and 16 mL of a saturated solution of Mg(OMe)2 in MeOH were stirred at 90° for 2 h. The resulting solid was added to 100 mL n-heptane and 8 mL HSiCl3 and stirred at 70° for 5 h. Then, 100 mL toluene and 1.5 mL TiCl4 at 90° (2 h) reacted with the previous solid, giving a catalyst component (I) with Mg 1.64, Ti 0.64, and Cl 15.5%. A copolymn. used 26.6 mg I, 700 mL isobutane, 0.7 mmol iso-Bu3Al, H2 and C2H4 at 1.5 and 5 kg/cm2 partial pressure, resp., and 30 g 1-butene. The product showed a melt flow index of 0.25 g/10 min, bulk d. 0.38 g/cm3, and true d. 0.9301 g/cm3; the specific catalytic activity was 338 g/g

catalyst.h.ethylene partial pressure and 52.7 kg/g Ti.h.ethylene partial pressure.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for olefin polymerization)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 30 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:175515 HCAPLUS
DOCUMENT NUMBER: 100:175515
TITLE: Polymerization catalysts for olefins
PATENT ASSIGNEE(S): Toa Nenryo Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

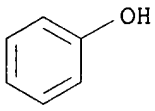
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58222103	A2	19831223	JP 1982-103839	19820618
JP 01053883	B4	19891116		

PRIORITY APPLN. INFO.: JP 1982-103839 19820618

AB Polymerization catalysts for olefins are prepared by treating Mg alkoxides with carboxylates of Groups IIA, IIIA, IVA, or VA metals with or without halogen groups, and Ti compds. Thus, a mixture of 22.0 g (EtO)2Mg [2414-98-4] and 12.0 g BzOAlCl2 [89642-14-8] was ball milled 16 h. The above product (12 g) was treated with 50 mL TiCl4 in 100 mL PhMe at 110° for 2 h and washed with n-hexane at 65° to give 10.8 g solid catalyst containing Ti 9.8, Mg 14.6, and Cl 58.8%. Ethylene (I) was charged to a reactor containing 11.45 mg of the above catalyst, 0.7 mmol iso-Bu3Al [100-99-2], 700 mL isobutane, and 2 kg/cm2 (partial pressure) H at 85° to maintain I partial pressure at 5 kg/cm2 for 60 min to give 323.2 g polyethylene [9002-88-4] having melt index 1.05, melt flow ratio 35.5, bulk d. 0.35, and content of cyclohexane-soluble material 0.23%.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of olefins)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

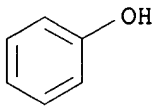
L53 ANSWER 31 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:175514 HCAPLUS
DOCUMENT NUMBER: 100:175514
TITLE: Polymerization catalysts for olefins
PATENT ASSIGNEE(S): Toa Nenryo Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58222104	A2	19831223	JP 1982-105284	19820621
JP 01053884	B4	19891116		

PRIORITY APPLN. INFO.: JP 1982-105284 19820621

AB Polymerization catalysts for olefins are prepared by treating Mg alkoxide with carboxylic acid salts of Groups IIA, IIIA, IVA, and VA metals with or without halogen groups, halogen-containing compds., and Ti compds. Thus, a mixture of 11.8 g (EtO)2Mg [2414-98-4] and 11.7 g BzOAlCl2 [89642-14-8] was ball milled 15 h. The solid product (11.7 g) was treated with 25 g SiHCl3 in heptane at 70° and washed with n-hexane to give 7.8 g solid product. The above product (6.9 g) was treated with 60 mL TiCl4 in PhMe at 90° and washed with n-hexane to give 5.5 g catalyst containing Ti 3.0, Mg 17.3, Cl 60.2, and Al 0.5%. When propylene (0.8 L, liquid) was polymerized in the presence of 30.6 mg of the above catalyst, Et3Al [97-93-8] (Al-Ti atomic ratio 200), 2.3 mL EtOBz, 0.6 L H, and 1 L n-heptane at 70° for 1 h, 240 g polypropylene [9003-07-0] having bulk d. 0.40 g/cm3 and containing 95.2% of boiling n-heptane-insol. material was formed.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of olefins)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 32 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:52197 HCAPLUS
DOCUMENT NUMBER: 100:52197
TITLE: Catalyst component for α-olefin polymerization
INVENTOR(S): Shimizu, Hiroshi; Abe, Masaki; Sato, Akihiro
PATENT ASSIGNEE(S): Chisso Corp. , Japan
SOURCE: Eur. Pat. Appl., 56 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

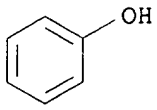
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 93494	A1	19831109	EP 1983-301439	19830315
EP 93494	B1	19860604		
R: DE, FR, GB, IT				
JP 58189206	A2	19831104	JP 1982-72994	19820430
JP 02033043	B4	19900725		
US 4535069	A	19850813	US 1983-466971	19830216

PRIORITY APPLN. INFO.: JP 1982-72994 19820430

AB An α-olefin polymerization catalyst is prepared by treating MgRR' (R = alkyl, aryl, alkoxy, or aryloxy; R' = alkyl, aryl, alkoxy, aryloxy, or halogen) with a complex of AlR2nX3-n (R2 = alkyl, aryl, alkoxy, or aryloxy; X = halogen; 0 ≤ n < 2) and an organic acid ester to give a solid product, which was treated with a halogen Ti compound Thus, 16.7 g AlCl3-BzOEt complex in 250 mL 1,1,2-trichloroethane was added dropwise to 100 mL heptane solution containing 14.2% n-butyl-sec-butylmagnesium (I) [39881-32-8]. The mixture was kept at 0° for 30 min then heated at 80° for 1 h to give a solid product. A mixture of 5.0 g above-prepared solid and 100 mL TiCl4 was heated at 110° for 1 h. The mixture was allowed to stand to remove the supernatant and unreacted TiCl4. Addnl. 100 mL TiCl4 was added and the mixture was heated at 110° for 1.5 h. The TiCl4 treating procedure was repeated 3 times to give a catalyst containing 29.2 mg Ti/g catalyst. Propylene was added at 60° into a reactor containing a mixture of 100 mL hexane, 4.0 mmol Et3Al [97-93-8], 0.6 mmol Me p-toluate, and 70 mg above-prepared catalyst. The partial pressure of propylene was kept at 6 kg/cm2 gage for 1 h to give 2360 g polymer [9003-07-0]/g catalyst having atactic index 7.5, compared with 250 g and 28.3 using a catalyst containing MgCl2 in place of I.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)

(catalysts, for polymerization of olefins)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)

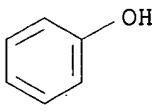


●1/2 Mg

L53 ANSWER 33 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:560047 HCAPLUS
DOCUMENT NUMBER: 99:160047
TITLE: Photochemical crosslinking catalysts for epoxy resin acrylates
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58053903	A2	19830330	JP 1981-152938	19810929
JP 59028568	B4	19840713		

PRIORITY APPLN. INFO.: JP 1981-152938 19810929
AB Photocurable coating materials contain epoxy resin acrylates and salts of phenols with strong bases. Thus, a composition of bisphenol A-epichlorohydrin copolymer acrylate [55818-57-0] 6, trimethylolpropane triacrylate 4, and PhONa [139-02-6] solution (from PhOH 9.4, H2O 13.4, MeOH 13.4, and NaOH 4.0 parts) 0.2 part when coated on sheet metal to 80 mg/100 cm2 and exposed to UV light (10 m/min, 80 W/cm, standoff 15 cm) became touch-dry.
IT **5793-84-0**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for photocuring of epoxy acrylate coatings)
RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



1/2 Ca

L53 ANSWER 34 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:453346 HCAPLUS
DOCUMENT NUMBER: 99:53346
TITLE: o-Methylated phenols
INVENTOR(S): Inoue, Yasuhiko; Nishizaki, Tadao; Taguchi, Satoshi
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd. , Japan
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 73471	A1	19830309	EP 1982-107818	19820825
EP 73471	B1	19850529		
R: DE, FR, GB, IT, NL				
JP 58038225	A2	19830305	JP 1981-137557	19810831
JP 01033090	B4	19890711		
JP 58128333	A2	19830730	JP 1982-13151	19820128
JP 02037331	B4	19900823		
JP 58210037	A2	19831207	JP 1982-93792	19820531
JP 02037332	B4	19900823		
US 4454357	A	19840612	US 1982-411806	19820826
CA 1200560	A1	19860211	CA 1982-410450	19820830

PRIORITY APPLN. INFO.: JP 1981-137557 19810831
JP 1982-13151 19820128
JP 1982-93792 19820531

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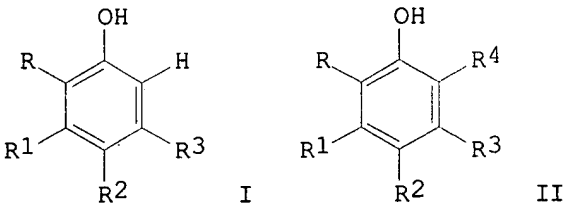
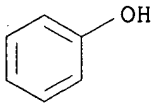


I II

AB o-Methylated phenols were prepared by reacting MeOH with a phenol (I; R, R1, R2, R3 represent H, C1-5 alkyl, OH, halo, NO2, MeO, NH2, aryl) in the presence of a catalyst containing at least one compound selected from the group consisting of (1) MgO, Mn and Fe oxides which are all pretreated with a phenol derivative (II; R, R1, R2, R3, R4 represent H, C1-5 alkyl, OH, halo, NO2, MeO, NH2, aryl), and (2) magnesium phenolate. Thus, PhOH, MeOH, and H2O were reacted at 500° in the presence of MgO catalyst treated with PhOH to give 2,6-xylenol with 92 mol % selectivity based on PhOH.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for methylation of phenol)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

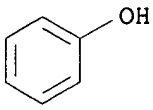
L53 ANSWER 35 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:439531 HCAPLUS
DOCUMENT NUMBER: 97:39531
TITLE: α-Olefin polymerization
INVENTOR(S): Asahi, Satoshi; Takeshita, Yasuhiro
PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 49467	A1	19820414	EP 1981-107751	19810930
R: BE, DE, FR, GB, IT				
JP 57063309	A2	19820416	JP 1980-137549	19801003
JP 64000407	B4	19890106		
CA 1165050	A1	19840403	CA 1981-386167	19810918

PRIORITY APPLN. INFO.: JP 1980-137549 19801003

AB Polyolefins having high apparent d. and stereospecificity are prepared in the presence of a catalyst comprising the reaction product of a Mg compound and a Ti compound, an organometallic compound, and an electron donor compound Thus, 10.0 g Mg(OEt)2 [2414-98-4] and 2.64 g Et benzoate [93-89-0] were refluxed 1 h, heated to 70°, mixed dropwise with 83 g TiCl4 over 30 min, refluxed 3 h, heated to 80°, mixed with 250 mL heptane, separated, mixed with 150 mL heptane, heated to 70°, mixed dropwise with 83 g TiCl4 over 30 min, and refluxed 3 h to give a catalyst component having 26 mg Ti/g support. A mixture containing 400 mL heptane, 2 mmol AlEt3 [97-93-8], 0.5 mmol Me p-toluylate [99-75-2], and 0.02 mmol (as Ti) above catalyst component was heated to 70° and pressurized with propylene containing H (0.2 kg/cm2) to total pressure 7 kg/cm2-G to give 221 g polypropylene [9003-07-0] having isotacticity index 96%, total isotacticity index 92%, and apparent d. 0.38 g/mL.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of olefins)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 36 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:52894 HCAPLUS
DOCUMENT NUMBER: 96:52894
TITLE: Titanium-containing catalyst components for Ziegler catalyst systems
INVENTOR(S): Klaerner, Peter; Bachl, Robert; Schweier, Guenther
PATENT ASSIGNEE(S): BASF A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 24 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

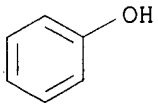
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3019493	A1	19811126	DE 1980-3019493	19800522

PRIORITY APPLN. INFO.: DE 1980-3019493 19800522

AB The title compns. are prepared from TiCl3-AlCl3 complexes or (chloro)titanates, Mg alkoxides, and AlCl3, ZnCl2, or MnCl2 (Ti-Mg 1:0.2-200, Ti-metal chloride ratio 1:0-20) by grinding in the presence of C1-12 alkanols, C5-12 alkanes, and (chloro)alkyls of Al, Si, or Ti. Thus, 1 part 3TiCl3·AlCl3 and 8 parts Mg(OPh)2 [7721-07-5] are ball-milled 20 h, and 1 part this product is stirred vigorously with 0.28 part EtOH and 5 parts heptane for 20 min at 50°, mixed with SiCl4 at 25° to solid-SiCl4 ratio 1:1, filtered, and washed to give a solid containing 2.88% Ti and 44.9% Cl. Stirring 0.1 part this solid with 2.5 parts AlEt3 [97-93-8], 4500 parts Me3CH, 20 bar C2H4, and 5 bar H at 100° for 2 h gives 2600 parts polyethylene [9002-88-4] (903,000 parts/part Ti) with bulk d. 425 g/L, melt index 0.4 g/10 min, and fraction with particle size <0.1 mm 0.5%.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of ethylene)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 37 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:7238 HCAPLUS
DOCUMENT NUMBER: 96:7238
TITLE: Homo- and copolymers of α-monoolefins by means of a Ziegler catalyst system
INVENTOR(S): Bachl, Robert; Klaerner, Peter; Schweier, Guenther; Ehlers, Ehler
PATENT ASSIGNEE(S): BASF A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3015702	A1	19811029	DE 1980-3015702	19800424
US 4367321	A	19830104	US 1981-249680	19810331
EP 38973	A2	19811104	EP 1981-102699	19810409
EP 38973	A3	19820203		
EP 38973	B1	19840725		
R: AT, BE, DE, FR, GB, IT, NL				
AT 8643	E	19840815	AT 1981-102699	19810409

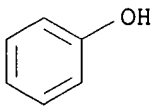
PRIORITY APPLN. INFO.: DE 1980-3015702 19800424
EP 1981-102699 19810409

AB Ti-containing catalyst components for the Ziegler polymerization of C2-6 monoolefins are manufactured from a Ti compound with the structure TiCl3.zAlCl3 (z = 0-0.5) or Ti(OR)4-mClm (R = C1-18 alkyl; m = 0-3), Mg alcoholates, and optionally metal chlorides. Thus, a 1:8 TiCl3.0.33AlCl3- Mg phenolate [7721-07-5] mixture was ground in a ball mill for 20 h and 1 part of the product was mixed with 0.28 part EtOH and 5 parts n-heptane to give a suspension which was stirred for 20 min at 50°. The suspension was treated with SiCl4 to give Mg-Si atomic ratio 1:1. The solid product recovered contained 2.88% Ti and 44.9% Cl. Ethylene (20 bar) was polymerized for 2 h at 100° in the presence of 0.1 part above solid product and 2.5 part Et3Al [97-93-8] under H partial pressure 5 bar to give 2600 parts polyethylene (I) [9002-88-4] having apparent d. 425 g/L, melt index 0.4 g/10 min, and content of particles with diameter <0.1 mm 0.5%. The catalyst productivity was 26,000 parts I/part Ti catalyst component and 903,000 parts I/part Ti in catalyst component.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for Ziegler polymerization of olefins)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 38 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:516232 HCAPLUS
DOCUMENT NUMBER: 95:116232
TITLE: α-Olefin polymerization catalyst
INVENTOR(S): Karayannis, Nicholas M.; Skryantz, John S.
PATENT ASSIGNEE(S): Standard Oil Co., USA
SOURCE: U.S., 20 pp. Cont.-in-part of U.S. Ser. No. 14,891, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4277370	A	19810707	US 1980-113543	19800121
EP 15645	A1	19800917	EP 1980-300308	19800201
EP 15645	B1	19840815		
R: AT, BE, DE, FR, GB, IT, NL				
AT 9000	E	19840915	AT 1980-300308	19800201
IN 153684	A	19840804	IN 1980-DE96	19800211
CA 1136603	A1	19821130	CA 1980-345426	19800212
NO 8000412	A	19800818	NO 1980-412	19800214
ES 488599	A1	19801216	ES 1980-488599	19800214
JP 55123606	A2	19800924	JP 1980-17688	19800215
JP 01024802	B4	19890515		
PL 129884	B1	19840630	PL 1980-232441	19800215
CS 234016	B2	19850314	CS 1980-1060	19800215
RO 80794	P	19830429	RO 1980-100426	19800310

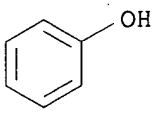
PRIORITY APPLN. INFO.: US 1979-14891 19790215
US 1980-113543 19800121
EP 1980-300308 19800201

AB Stereospecific catalyst components for the polymerization of olefins having ≥3 C atoms comprise a Ti (IV) halide, an organic electron donor, and a pretreatment product containing a Mg alcoholate, a Group II or Group IIIA metal alkyl, and, optionally a crystallinity promoter. The catalysts components are activated by milling or contacting with liquid Lewis acids. Thus, 11.4 g Mg(OEt)2 [2414-98-4] was mixed with 100 mL hexane, mixed with 10 mL 25% Et3Al [97-93-8] solution in hexane over 0.25 h, suspended in 450 mL nonane, mixed with 50 mL TiCl4, mixed with 2 mL PhCO2Et [93-89-0] solution in nonane over 0.25 h, heated 1.5 h at 140-145°, cooled to 115-120°, separated, ball-milled for 5 h, and suspended in hexane to give a catalyst

component. This catalyst (0.052 g) was mixed with 0.5 mL 25% Et3Al solution in hexane, mixed with 0.006 mL PhCO2Et and 0.003 mL Et p-anisate [94-30-4], and pressurized with propylene to 50 psig to give polypropylene (I) [9003-07-0] having 1.4 weight% solubles (catalyst activity 702 g I/g catalyst/h).

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of olefins)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 39 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:443955 HCAPLUS
DOCUMENT NUMBER: 95:43955
TITLE: Stereospecific polymerization catalysts for α-olefins
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

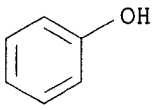
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56026904	A2	19810316	JP 1979-102077	19790809

PRIORITY APPLN. INFO.: JP 1979-102077 19790809

AB Reaction products of Mg compds., compds. containing N, O, P, and (or) S atoms, and halogen-containing Ti compds. are used with organoaluminum and electron donors containing N, O, P, and (or) S atoms as polymerization catalysts for α-olefins for manufacture of highly stereospecific polymers. Thus, 21 g (PhO)2Mg in 150 mL TiCl4 was treated 2 h with 8.0 g EtOBz and 3.0 g (PhO)2POH at 120° filtered out at 120°, washed with n-heptane(I), dried, dispersed in 120 mL TiCl4, and treated 2 h with 2.0 g EtOBz and 1.5 g (PhO)2POH at 120°, filtered out at 120°, and washed with I to give 9.7 g catalyst containing 2.6 weight% Ti. To an autoclave 0.5 g Et3Al [97-93-8], 0.53 g Et2AlCl [96-10-6], 0.5 g p-MeC6H4CO2Me [99-75-2], 10 mL I, 0.5 atm H, and 1.4 kg propylene were charged in that order and stirred 2 h at 60° to give 562 g polypropylene [9003-07-0] containing 94.0% boiling-I-insol. fractions.

IT **7721-07-5D**, reaction products with titanium chloride, Et benzoate, and di-Ph phosphite
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, containing organoaluminum and electron donors, for

polymerization of propylene)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 40 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:175869 HCAPLUS
DOCUMENT NUMBER: 94:175869
TITLE: Catalyst components for the polymerization and the copolymerization of olefins
INVENTOR(S): Delbouille, Andre; Derroitte, Jean L.
PATENT ASSIGNEE(S): Solvay et Cie., Belg.
SOURCE: U.S., 9 pp. Cont. of U.S. Ser. No. 313,946, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4250284	A	19810210	US 1975-552335	19750224
GB 1275641	A	19720524	GB 1969-706	19690106
BE 743325	A	19700618	BE 1969-743325	19691218
FR 2027788	A5	19701002	FR 1969-44529	19691222
ZA 6908988	A	19710728	ZA 1969-8988	19691229
CH 514351	A	19711031	CH 1969-514351	19691230
ES 375152	A1	19720516	ES 1970-375152	19700103
PL 70931	P	19740430	PL 1970-137991	19700105
CA 950600	A1	19740702	CA 1970-71445	19700105
DK 130469	B	19750224	DK 1970-22	19700105
NO 133840	B	19760329	NO 1970-19	19700105
CS 167271	P	19760429	CS 1970-70	19700105
NL 7000094	A	19700708	NL 1970-94	19700106
NL 162663	B	19800115		
NL 162663	C	19800616		
SU 415850	D	19740215	SU 1970-1493271	19700106
RO 61031	P	19761115	RO 1970-62054	19700106
AT 295135	B	19711227	AT 1970-124	19700107

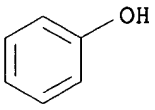
PRIORITY APPLN. INFO.: GB 1969-706 19690106
US 1969-889737 19691231
US 1972-313946 19721211

AB Olefin polymerization catalysts with an enhanced catalytic activity consist of an organometallic compound and a solid prepared by treating a halogen-containing transition metal compound with a metal alkoxide in the

absence of moisture and solvent. Thus, TiCl4 was treated with Mg ethylate at 130° to give a catalytic solid containing Mg 207, Ti 41, Cl 628, C 74, H 16, and O 34 g/kg. When used in combination with (iso-Bu)3Al [100-99-2] to polymerize ethylene the solid provided polyethylene (I) [9002-88-4] having melt index 28 g/10 min. The catalytic activity was 31,700 g I/h/g Ti and atm monomer and the catalytic productivity was 5140 g I/g. When the solid was used with Et2AlCl [96-10-6], the polymer produced had melt index 1.0 g/10 min and the catalytic activity and productivity were 10,500 g I/h/g Ti and 1700 g I/g, resp.

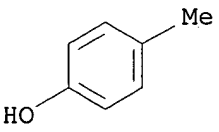
IT **7721-07-5D**, reaction products with titanium tetrachloride
32664-67-8D, reaction products with titanium tetrachloride
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, containing organometallic compds., for polymerization of olefins)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

RN 32664-67-8 HCAPLUS
CN Phenol, 4-methyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 41 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1980:621327 HCAPLUS
DOCUMENT NUMBER: 93:221327
TITLE: α-Olefin polymerization catalyst for polymerizing α-olefins
INVENTOR(S): Karayannis, Nicholas Marios; Skryantz, John Stephen
PATENT ASSIGNEE(S): Standard Oil Co., USA
SOURCE: Eur. Pat. Appl., 71 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 15645	A1	19800917	EP 1980-300308	19800201
EP 15645	B1	19840815		
R: AT, BE, DE, FR, GB, IT, NL				
US 4277370	A	19810707	US 1980-113543	19800121
AT 9000	E	19840915	AT 1980-300308	19800201

PRIORITY APPLN. INFO.:

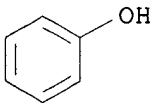
US 1979-14891	19790215
US 1980-113543	19800121
EP 1980-300308	19800201

AB The title catalysts for stereospecific polymerization of C≥3 α-olefins comprise an organoaluminum component and a solid component; the latter consists of ≥1 (1) halogen-containing compound of Ti(IV), (2) ≥1 electron donor (0.001-1 mol/g-atom Ti), and (3) ≥1 hydrocarbon-insol., Mg-containing pretreatment product of ≥1 Mg alcoholate (atomic ratio Ti to metal in Mg alcoholate = ≥0.5:1), and ≥1 Group II or Group IIIA metal alkyl (atomic ratio of this metal to metal in Mg alcoholate = 0.001:1). Optionally ≥1 pretreatment modifiers such as mineral acid or anhydride of sulfur, organic acid, or organic acid ester, are used. Preferably the solid component is treated with ≥1 liquid Lewis acid to remove surface impurities, and then mech. activated. Thus, a product (atomic ratio Al-Mg 0.15:1) prepared from Mg(OEt)2 and Et3Al suspended in nonane was treated with TiCl4 at ambient temperature Et benzoate (I) [93-89-0] in nonane was added dropwise, with subsequent heating and stirring at 140-45° to give a solid supported catalyst component (Ti 3.1, Mg 16.9, Cl 53.1, Al 0.1 weight%), which was activated by ball-milling under N at ambient temperature (Ti-Mg atomic ratio 4.6:1; I-Ti ratio 0.03 mol/g-atom). Propylene was polymerized in hexane at 60° and 50 psig in presence of 0.52 g activated catalyst, 0.15 mL 25% Et3Al in hexane, 0.006 mL I, and 0.003 mL 2,2,6,6-tetramethylpiperidine [768-66-1] to give 953 g polypropylene [25085-53-4]/g catalyst/h containing 2.6% by-product sols.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, modified Zeigler, for stereospecific polymerization of propene)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 42 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:612399 HCAPLUS
DOCUMENT NUMBER: 91:212399

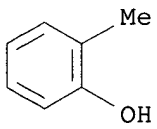
TITLE: Manufacture of soft polymers
INVENTOR(S): Oda, Hidekuni; Yamamoto, Yozo; Kajiura, Hirokazu; Minami, Shuji; Ono, Takao
PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54085293	A2	19790706	JP 1977-153003	19771221
JP 60043848	B4	19850930		

PRIORITY APPLN. INFO.: JP 1977-153003 19771221

AB Random 1-butene-propylene copolymer (I) [29160-13-2] (60-98 mol% 1-butene) with excellent transparency, softness, and freedom from tack was prepared in the presence of catalysts from Mg Ti halide, organic derivs. of Group I-III metals, and electron donors, and had boiling hexane-insol. content <5.0%, boiling MeOAc-soluble content <2.0%, DSC m.p. 40-120°, intrinsic viscosity (in Decalin, 135°) 0.5-0.6 dL/g, elongation at break >400%, tensile strength >100 kg/cm2, and stiffness (JIS K 6745) <1000 kg/cm2. For example, 20 g MgCl2, 4.0 L Et benzoate [93-89-0], and 3.0 mL polysiloxane were ball-milled for 100 h, and the solid product (10 g) was stirred with 100 mL TiCl4 at 80° for 2 h to give a solid catalyst (II) with Ti content 2.0%. 1-Butene-propylene (90:10) was polymerized in the presence of II 0.03, Et3Al [97-93-8] 0.03, and 4-MeC6H4CO2Me [99-75-2] 0.33 mmol/L in toluene at 60° to give tack-free I with 1-butene content 77.7 mol%, DSC m.p. 106°, intrinsic viscosity 3.8 dL/g, boiling hexane-insol. content 0.3%, boiling MeOAc-soluble content 0.15%, tensile strength 325 kg/cm2, elongation at break 550%, and stiffness 430 kg/cm2, compared with 69.6, 69 (and 97), 2.9, 34.1, 2.9, 153, 850, and 710, resp., for a slightly tacky specimen prepared using TiCl3 in place of II.

IT **65851-31-2**
RL: **CAT (Catalyst use)**; USES (Uses)
(titanium catalysts containing, for manufacture of butene-propylene copolymers)
RN 65851-31-2 HCAPLUS
CN Phenol, 2-methyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 43 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:122274 HCAPLUS

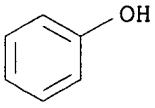
DOCUMENT NUMBER: 90:122274
TITLE: Polymerization catalysts for ethylene
INVENTOR(S): Yokota, Yoshihisa; Hosokawa, Teruo; Sakashita, Kiichiro
PATENT ASSIGNEE(S): Showa Yuka K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53132082	A2	19781117	JP 1977-46780	19770425
JP 59001412	B4	19840112		

PRIORITY APPLN. INFO.: JP 1977-46780 19770425

AB Complexes of Al oxyhalides and alkoxyaluminum dihalides and organic Si compds. having aryl or aralkyl groups directly attached to Si are treated with alkoxymagnesiums and Ti halides, and the reaction products are used with organoaluminums as catalysts for polymerization of ethylene (I) optionally in the presence of other olefins. Thus, 2.58 g (AlOCl)0.70(iso-PrOAlCl2)0.30 (prepared by the reaction of iso-PrOH with EtAlCl2) and 6.54 g tetracresylsilane [26952-29-4] were stirred in C6H6 at room temperature and treated with 0.941 g (EtO)2Mg [2414-98-4] at 70° for 1.5 h to give 3.16 g brown powder. The powder was treated with 7 mL TiCl4 at 110°, cooled, washed with hexane, and dried to give 2.68 g catalyst containing Ti 3.3, Cl 34, Mg 8.6, Al 8.3, and Si 3.5%. I was charged to an autoclave containing 1.4 mL of 0.5 mmol/mL iso-Bu3Al [100-99-2] solution in n-heptane, 12.0 mg of the above-prepared catalyst, 346 g isobutane, and 4 kg/cm2 (85°) H to 14 kg/cm2 for 50 min to give 228 g polyethylene [9002-88-4] having bulk d. 0.26, d. 0.9574, melt index (190°, 2.16 kg) 80.7.

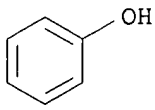
IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of ethylene)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 44 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:562922 HCAPLUS
DOCUMENT NUMBER: 89:162922
TITLE: Asymmetric catalytic allylation of β-diketones or β-ketoesters with allylic ethers using a palladium-DIOP catalyst:

a mechanistic study
AUTHOR(S): Fiaud, J. C.; Hibon de Gournay, A.; Larcheveque, M.; Kagan, H. B.
CORPORATE SOURCE: Lab. Synth. Asymetrique, Univ. Paris-Sud, Orsay, Fr.
SOURCE: Journal of Organometallic Chemistry (1978), 154(2), 175-85
CODEN: JORCAI; ISSN: 0022-328X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Allylation of β-diketones (e.g., 2-acetylcyclohexanone), β-keto esters and methine active H compds. by allyl Ph ethers (e.g., PhOCH2CH:CH2) or allyl esters (e.g., AcOCH2CH:CH2) with Pd-phosphine catalytic systems was studied. The use of DIOP [2,3-O-isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane] as chiral phosphine ligand produces optically active allylated compds.
IT **2678-41-3**
RL: **CAT (Catalyst use)**; USES (Uses)
(cocatalyst, in catalytic asym. allylation of diketones or keto esters)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

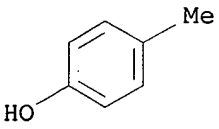
L53 ANSWER 45 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:511907 HCAPLUS
DOCUMENT NUMBER: 89:111907
TITLE: Random copolymer of propylene and 1-butene
INVENTOR(S): Oda, Hidekuni; Yamamoto, Yozo; Kajiura, Hirokazu; Minami, Shuji; Ono, Takao
PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: Ger. Offen., 64 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2757863	A1	19780629	DE 1977-2757863	19771223
DE 2757863	C2	19821202		
JP 53079984	A2	19780714	JP 1976-155068	19761224
JP 57011322	B4	19820303		

PRIORITY APPLN. INFO.: JP 1976-155068 19761224
AB Random (low-crystalline) 10-60:40-90 1-butene-propylene copolymers (I)

[29160-13-2] having desirable chemical, mech., and phys. properties were obtained by polymerization in the presence of a catalyst comprising: (a) a solid complex containing Mg, Ti, and halogen, (b) an organometallic compound containing a Group I-III metal, and (c) an electron donor. Thus, 20 g anhydrous MgCl2, 4.6 mL Et benzoate, and 3.0 mL methylpolysiloxane were ball-milled 100 h under N and 10 g of the solid product was suspended in 100 mL TiCl4 and stirred 2 h at 80° to give a solid complex (A). A 35:65 mol % gas mixture of 1-butene and propylene was polymerized at 70° in the presence of A, Et3Al, and Me p-toluate [99-75-2] at a rate of 141 g/h. I contained fractions insol. in boiling heptane and boiling MeOAc 0.1 and 0.3%, resp., and had m.p. 99°, latent heat of fusion 53 J, and intrinsic viscosity 1.67 dL/g (Decalin, 135°); a I film had tensile strength at break 20 kg/cm2 (JIS K6301), elongation at break 710% (KIS K6301), and turbidity 10% (JIS K6714).

IT **32664-67-8**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts containing, for polymerization of butene with propylene)
RN 32664-67-8 HCAPLUS
CN Phenol, 4-methyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 46 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:490471 HCAPLUS
DOCUMENT NUMBER: 89:90471
TITLE: Improved ethylene polymers
INVENTOR(S): Yokota, Yoshihisa; Hosokawa, Teruo; Sakashita, Kiichiro
PATENT ASSIGNEE(S): Showa Yuka K. K., Japan
SOURCE: Ger. Offen., 67 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2757725	A1	19780706	DE 1977-2757725	19771223
DE 2757725	B2	19800424		
DE 2757725	C3	19801218		
JP 53078287	A2	19780711	JP 1976-154218	19761223
JP 56039766	B4	19810916		
JP 54075491	A2	19790616	JP 1977-141487	19771128
JP 59001408	B4	19840112		
JP 54081190	A2	19790628	JP 1977-148780	19771213

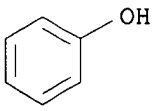
JP 59001409	B4	19840112			
GB 1575856	A	19801001	GB 1977-53356	19771221	
US 4242479	A	19801230	US 1977-863560	19771222	
PRIORITY APPLN. INFO.:			JP 1976-154218	19761223	
			JP 1977-141487	19771128	
			JP 1977-148780	19771213	

AB Reaction products of Al halides with Mg alkoxides and Si alkoxides and/or ethers are catalysts with high activity in the polymerization of C2H4, optionally with 1-alkenes. Thus, stirring 35.0 mmol AlCl3 and 35.0 mmol Si(OEt)4 in 30 mL C6H6 30 min at 25°, adding 17.5 mmol Mg(OEt)2, stirring 1.5 h at 75°, and stirring the solid product with 8 mL TiCl4 1.5 h at 90° gives a catalyst containing 4.3% Ti and 55% Cl. Stirring 15.3 mg this catalyst with 1.4 mL 0.5 M iso-Bu3Al, 346 g Me3CH, 2 kg/cm2 H, and 24 kg/cm2 C2H4 45 min at 85° gives polyethylene [9002-88-4] with yield 1920 g/g catalyst-h-atm, bulk d. 0.28, melt index 0.52, and d. 0.9526, compared with 213, 0.135, 0.197, and 0.9524, resp., in the absence of AlCl3.

IT **7721-07-5D**, reaction products with alkoxysilanes, aluminum chloride and titanium tetrachloride
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of olefins)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 47 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1978:191799 HCAPLUS
DOCUMENT NUMBER:	88:191799
TITLE:	Polymerization catalysts for olefins
INVENTOR(S):	Minami, Shuji; Kashiwa, Norio
PATENT ASSIGNEE(S):	Mitsui Petrochemical Industries, Ltd., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53002580	A2	19780111	JP 1976-76085	19760629
JP 59052166	B4	19841218		
ZA 7703671	A	19780530	ZA 1977-3671	19770620
AU 7726339	A1	19790104	AU 1977-26339	19770622
GB 1554340	A	19791017	GB 1977-26417	19770623
BE 856189	A1	19771228	BE 1977-178838	19770628

SE 7707468	A	19771230	SE 1977-7468	19770628
SE 435518	B	19841001		
SE 435518	C	19850110		
NO 7702287	A	19771230	NO 1977-2287	19770628
NO 150721	B	19840827		
NO 150721	C	19841205		
DE 2729196	A1	19780105	DE 1977-2729196	19770628
DE 2729196	C2	19870723		
FR 2356676	A1	19780127	FR 1977-19819	19770628
FR 2356676	B1	19800801		
BR 7704220	A	19780404	BR 1977-4220	19770628
ES 460188	A1	19780501	ES 1977-460188	19770628
AT 7704571	A	19781015	AT 1977-4571	19770628
AT 350257	B	19790525		
CA 1082846	A1	19800729	CA 1977-281521	19770628
NL 7707220	A	19780102	NL 1977-7220	19770629
NL 169324	B	19820201		
NL 169324	C	19820701		

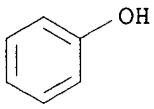
PRIORITY APPLN. INFO.: JP 1976-76085 19760629

AB Solid catalysts from alkoxymagnesium or aryloxymagnesium compds., electron donors, and Ti compds., containing 6-50:1 halogen/Ti (molar) and 0.1-1:1 electron donor/Ti (molar), are used with organometallic compds. of Group I-III metals and electron donors for polymerization of olefins. Thus, a mixture of 0.2 mol (PhO)2Mg and 0.033 mol EtOBz was ball milled and heated 2 h in 200 mL TiCl4 at 80° to give a solid catalyst containing Ti 3.5, Cl 54, Mg 18, and EtOBz 11.1%. Propylene (7.0 kg/cm2) was charged to a reactor containing 750 mL hexane, 5 mmol Et3Al [97-93-8], 1.59 mmol Me 4-methylbenzoate [99-75-2], 0.03 mmol (based on Ti) of the above catalyst, and 350 mL H at 60° for 4 h to give 244 g polypropylene [9003-07-0] containing 96.2% of boiling heptane-insol. fraction and having bulk d. 0.36 and melt index 4.9.

IT **7721-07-5D**, reaction products with Et benzoate and titanium tetrachloride
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, containing Me toluate and triethylaluminum, for polymerization of propylene)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 48 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:137212 HCAPLUS
DOCUMENT NUMBER: 88:137212
TITLE: α-Olefin polymers or copolymers
INVENTOR(S): Arita, Shunji; Soma, Yoshikuni

PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: Ger. Offen., 36 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2739608	A1	19780309	DE 1977-2739608	19770902
DE 2739608	C2	19870827		
JP 53030681	A2	19780323	JP 1976-104312	19760902
JP 57045244	B4	19820927		
SE 7709634	A	19780303	SE 1977-9634	19770826
SE 438681	B	19850429		
SE 438681	C	19850808		
ZA 7705201	A	19780726	ZA 1977-5201	19770826
AT 7706262	A	19781015	AT 1977-6262	19770830
AT 350259	B	19790525		
FR 2363583	A1	19780331	FR 1977-26489	19770831
FR 2363583	B1	19790323		
AU 7728419	A1	19790308	AU 1977-28419	19770831
AU 507025	B2	19800131		
GB 1580635	A	19801203	GB 1977-36398	19770831
NO 7703035	A	19780303	NO 1977-3035	19770901
NO 151661	B	19850204		
NO 151661	C	19850515		
ES 462046	A1	19780601	ES 1977-462046	19770901
BR 7705864	A	19780627	BR 1977-5864	19770901
CA 1085996	A1	19800916	CA 1977-285974	19770901
BE 858364	A1	19780302	BE 1977-180645	19770902
NL 7709699	A	19780306	NL 1977-9699	19770902
NL 162925	B	19800215		
NL 162925	C	19830316		

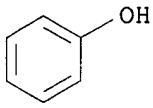
PRIORITY APPLN. INFO.: JP 1976-104312 19760902

AB Polyolefins with improved stereoregularity and bulk d. are prepared by polymerizing C≥3 1-alkenes in the presence of ≤1 mol % Ti as a complex containing Mg, electron donors, and halogens, and organic compds. of Group I-III metals, to ≤30% conversion at <50° and completing polymerization at 50-90°. Thus, ball-milling 20 g MgCl2, 6.0 mL BzOEt, and 3.0 Ml SiCl4 48 h, stirring this composition with 150 mL TiCl4, and rinsing with C6H14 gives a complex (I) containing Ti 1.6, Cl 64.0, and BzOEt 8.9%. Stirring AlEt3 1.8, BzOEt 0.6, and I (as Ti) 0.1 mmol with 1.0 L kerosine, 250 mL H, and 4 kg/cm2 C3H6 at 40° until 40 g C3H6 is consumed, heating over 20 min to 60°, and stirring 20 h at 60° and 7.0 kg/cm2 C3H6 gives polypropylene [9003-07-0] with yield 486 g, insoly. in boiling C7H16 96.4%, bulk d. 0.42, and intrinsic viscosity 2.9; compared with 412, 92.2, 0.37, and 2.6, resp., when the entire polymerization is at 60°.

IT **7721-07-5D**, reaction products with titanium tetrachloride, Lewis bases and halogen compds.
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for stereoregular polymerization of propylene)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

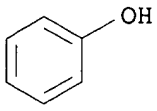
L53 ANSWER 49 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:106019 HCAPLUS
DOCUMENT NUMBER: 88:106019
TITLE: Polymers or copolymers of olefins with at least 3 carbon atoms
INVENTOR(S): Minami, Shuji; Kashiwa, Norio
PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: Ger. Offen., 29 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2729196	A1	19780105	DE 1977-2729196	19770628
DE 2729196	C2	19870723		
JP 53002580	A2	19780111	JP 1976-76085	19760629
JP 59052166	B4	19841218		

PRIORITY APPLN. INFO.: JP 1976-76085 19760629

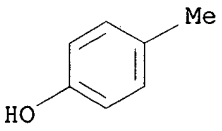
AB Polymers and copolymers of C3 and higher olefins are manufactured in the presence of catalysts consisting of Group I-III organometallic compds. and a solid catalyst component prepared from halogen-free Mg bis(organooxides), electron donors, and Ti halides. Thus, 0.2 mol Mg(OPh)2 and 0.033 mol EtOBz were ball-milled 100 h to give a solid product which was mixed with 200 mL TiCl4 and heated 2 h at 80°, giving a solid catalyst component (A). Propylene was polymerized at 7.0 kg/cm2 and 60° in the presence of 750 mL hexane containing Et3Al 5.0, Me p-toluate 1.59, and Ti (added as A) 0.03 mmol with addition of 350 mL H for 4 h, giving 244 g white, powdery polypropylene [9003-07-0] with boiling heptane extraction residue 96.2%, bulk d. 0.36, and melt index 4.9.

IT **7721-07-5 32664-67-8 65851-31-2**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of olefins)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



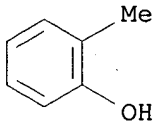
●1/2 Mg

RN 32664-67-8 HCAPLUS
CN Phenol, 4-methyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

RN 65851-31-2 HCAPLUS
CN Phenol, 2-methyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 50 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:453856 HCAPLUS
DOCUMENT NUMBER: 87:53856
TITLE: Ring-opened polymers
INVENTOR(S): Kobayashi, Yukio; Ueshima, Takashi; Kobayashi, Shoichi
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 52036200	A2	19770319	JP 1975-112068	19750815
US 4117672	A	19781003	US 1976-712348	19760806
GB 1554914	A	19791031	GB 1976-33646	19760812
DE 2636370	B2	19800807	DE 1976-2636370	19760812
AU 511029	B2	19800724	AU 1976-16833	19760813

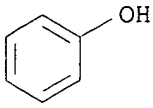
PRIORITY APPLN. INFO.: JP 1975-112068 19750815
JP 1975-112069 19750815

AB Norbornene derivs. containing polar groups (nitrile, ester, ether, imide, Cl, Br, acid anhydride, or amide), C1-20 hydrocarbon substituents containing the polar groups, or heteroarom. substituents containing ≥1 N atom and/or norbornadiene derivs. containing ≥1 aromatic ring and ≥1 ester group, or their mixts. with ≤50% cycloolefins are polymerized in the presence of catalysts: organometallic compds. of Group IA, IIA, IIB, IIIB, IVA, or IVB metals and comilled products of W, Mo, Re, Ta, or Nb compds. and metal alkoxides. Thus, 50 g WCl6 and 50 g Al(OEt)3 were ball-milled for 2 h at 1200 rpm and the powder (0.1 g) obtained stirred for 60 min at 50° with 250 mL 1,2-dichloroethane, 150 g 5-cyanobicyclo[2.2.1]hept-2-ene, and 1.8 mL 1,2-dichloroethane solution (1 M) of Et2AlCl to give 140 g polymer [30811-49-5], reduced viscosity 1.13 (0.1 g/dL, DMF, 30°).

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for ring-opening polymerization of norbornene derivs.)

RN 7721-07-5 HCAPLUS

CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 51 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN

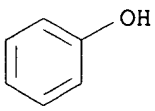
ACCESSION NUMBER: 1975:546762 HCAPLUS
DOCUMENT NUMBER: 83:146762
TITLE: Solvent and ion pair effects on the self-condensation of linear aliphatic aldehydes. Selective synthesis of substituted acrylaldehydes and glycol monoesters
AUTHOR(S): Casnati, Giuseppe; Pochini, Andrea; Salerno, Giuseppe; Ungaro, Rocco
CORPORATE SOURCE: Ist. Chim. Org., Univ. Parma, Parma, Italy
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1975), (16), 1527-31
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Addnl. data considered in abstracting and indexing are available from a source cited in the original document. 2,4,6-Me3C6H2OMgBr-catalyzed selfcondensation of RCH2CHO [R = Me, Et, Pr, Bu, (CH2)4Me]

in (Me2N)3PO with a 1:1 molar ratio of aldehyde and phenolate gave 90-6% of a mixture of RCH2CH(OH)CHRCH2O2CCH2R (I) and RCH2CO2CH(CH2R)CHRCH2OH (II), whereas similar reaction in C6H6 gave RCH2CH:CRCHO (III). The reaction in C6H6 was dependent on the catalyst and the catalyst-aldehyde ratio. Increasing the proportion of aldehyde, replacement of Mg2+ by other metal ions, and variation of the substituents on the phenolate anion led to the formation of I and II. The reaction occurred by initial aldolization and condensation to give RCH2CH(OH)CHRCHO which was either dehydrated to III or underwent transesterification after accepting H- to give I and II, depending on the reaction conditions.

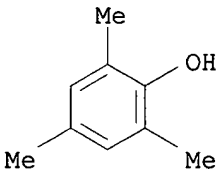
IT **7721-07-5 53389-47-2 57570-79-3**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalyst, for self-condensation of aldehydes)

RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



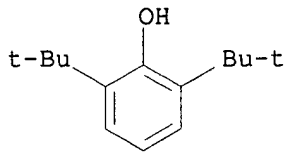
●1/2 Mg

RN 53389-47-2 HCAPLUS
CN Phenol, 2,4,6-trimethyl-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

RN 57570-79-3 HCAPLUS
CN Phenol, 2,6-bis(1,1-dimethylethyl)-, magnesium salt (9CI) (CA INDEX NAME)

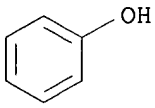


●1/2 Mg

L53 ANSWER 52 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:513949 HCAPLUS
DOCUMENT NUMBER: 77:113949
TITLE: Methylation of aromatic compounds with methanol
AUTHOR(S): Inoue, Masami; Enomoto, Saburo
CORPORATE SOURCE: Fac. Pharm. Sci., Univ. Toyama, Toyama, Japan
SOURCE: Sekiyu Gakkaishi (1972), 15(5), 372-8
CODEN: SKGSAE; ISSN: 0582-4664
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Aromatic alcs., amines, and halides were catalytically methylated with MeOH in liquid or vapor phase. The catalysts effective in methylation were specific for the aromatic substituents or functions, i.e., SiO2-Al2O3-BF3 with o-ClC6H4Me; SiO2-Al2O3 modified by H2NCH2CH2NH2 and Al2O3-HF with the selective methylation of o-, m-, and p-xylene; condensed phosphoric acid (CPA)-kieselguhr (KG), CPA-BF3-KG, and Al2O3-MgO-SiO2 with the m-substituted PhOH, Ce2O3-MnO-MgO with the o-substituted PhOH; and Al2O3-MgO with o-H2NC6H4Me, and PhNH2. The relation between catalytic activity and selectivity of the methylation site was discussed.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for methylation of phenol by methanol)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

L53 ANSWER 53 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:113926 HCAPLUS
DOCUMENT NUMBER: 76:113926
TITLE: Low-pressure catalytic polymerization and copolymerization of olefins
INVENTOR(S): Stevens, Jacques; George, Michel

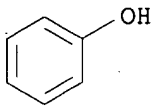
PATENT ASSIGNEE(S): Solvay et Cie.
SOURCE: Ger. Offen., 22 pp. Addn. to Ger. Offen. 2,000,834 (CA 73;121064a).
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2123356	A1	19711216	DE 1971-2123356	19710511
DE 2123356	C2	19831229		
FR 2093306	A6	19720128	FR 1970-21221	19700609
ZA 7102721	A	19720126	ZA 1971-2721	19710427
CH 521161	A	19720415	CH 1971-521161	19710511
SU 407435	D	19731121	SU 1971-1658576	19710517
CA 942734	A1	19740226	CA 1971-113322	19710518
BE 767586	A4	19711125	BE 1971-103798	19710525
IT 983140	A	19741031	IT 1971-25478	19710605
CS 169821	P	19760729	CS 1971-4147	19710607
ES 392021	A2	19731101	ES 1971-392021	19710608
AT 312284	B	19731227	AT 1971-4966	19710608
NL 7107896	A	19711213	NL 1971-7896	19710609
GB 1309987	A	19730314	GB 1971-19645	19710609
RO 62183	P	19770615	RO 1971-67237	19710609
JP 51149193	A2	19761221	JP 1976-65715	19760607
JP 56050888	B4	19811202		

PRIORITY APPLN. INFO.:
FR 1970-21221 19700609
FR 1969-1486 19690124
BE 1970-744522 19700116

AB Diethoxymagnesium [2414-98-4] and diphenoxymagnesium [7721-07-5] were treated with organoaluminum compds. and subsequently treated with titanium tetrachloride [7550-45-0] or vanadium oxytrichloride [7727-18-6] to give solid support catalysts which when mixed with an organoaluminum compound catalyzed the preparation of high mol. weight, extrudable polyethylene (I) [9002-88-4]. Thus, a hexane solution containing (EtO)2Mg and ethylaluminum sesquichloride [12075-68-2] was aged 1 hr at 25.deg. to give an intermediate which was treated by TiCl4 1 hr at 140.deg. to give a material which catalyzed the preparation of 1620 g I [flow index 2.5 g per 10 min (ASTM D1505-57T)]/hr .tim. g solid catalyst .tim. atm C2H4 in the presence of triisobutylaluminum [100-99-2] in hexane at 85.deg. under 10 and 4 kg/cm2 C2H4 and H pressure, resp. (EtO)2Mg was also treated by trimethylaluminum [75-24-1], triisooctylaluminum [34364-25-5], isoprenylaluminum [27761-11-1] (prepared by treatment of iso-Bu3Al with isoprene), and diethylaluminum chloride [96-10-6] before the TiCl4-treatment to give other solid support catalysts.

IT **7721-07-5**
RL: **CAT (Catalyst use)**; USES (Uses)
(polymerization catalysts containing, for ethylene polymerization)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

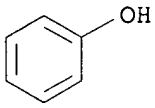
L53 ANSWER 54 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:44813 HCAPLUS
DOCUMENT NUMBER: 72:44813
TITLE: Homopolymers or copolymers of conjugated dienes
INVENTOR(S): Onishi, Akira; Fujio, Ryota; Kojima, Minoru; Kawamoto, Hiroshi
PATENT ASSIGNEE(S): Bridgestone Tire Co., Ltd.
SOURCE: Ger. Offen., 82 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1928856	B2	19740815	DE 1969-1928856	19690606
DE 1928856	C3	19750522		
GB 1271265	A	19720419	GB 1969-1271265	19690602
US 3629213	A	19711221	US 1969-830136	19690603
PRIORITY APPLN. INFO.:			JP 1968-38979	19680608
			JP 1968-59220	19680821

AB The title polymers were prepared in the presence of a catalyst system containing an organolithium compound (I) and a Ba compound, or the reaction product of I with Ca, Ru, or Cs. Thus, 100 parts toluene, 0.5 part BuLi (0.5 millimole), and 0.05 millimole (tert-Bu-O)2Ba were mixed and aged 60 min at 50°. Cyclohexane (100 parts) and 25 parts styrene was added, the mixture cooled to -78°, and 75 parts 1,3-butadiene added. The mixture was kept at 50° and excess 2% alc. N-phenyl-β-naphthylamine added to end polymerization The copolymer was dried at 50° in vacuo to give the following results (Ba compd-Li compound mole ratio, min. polymerization time, % yield, % styrene content, % product trans-1,4-butadiene units, % cis-1,4-butadiene units, and % vinyl content given): 0.1, 180, 70.0, 17.4, 67.9, 20.0, 12.1; 0.5, 90, 40.0, 21.1, 66.3, 21.1, 11.9; 0.0, 180, 76.0, 6.2, 53.7, 37.5, 8.8. (iso-PrO)2Ba, bis(cyclohexyloxy)barium, (PhO)2Ba, Ba stearate, (tert-BuO)2Ba, PhLi, dilithiostilbene, the reaction product of Ca and BuLi and the reaction product of Ca and PhLi were also used as catalysts. Vulcanized rubber compns. were prepared from styrene-butadiene copolymer and carbon black, ZnO, stearic acid, S, benzothiazolesulfenamide, and an aromatic oil. 2,6-Di-tert-butyl-p-cresol was used to terminate polymerization Isoprene was also claimed as a monomer, and Ph2Ba, Ba benzophenone ketyl, bis(cyclopentadienyl)barium, 1,2-acenaphthenylenebarium, Cs-BuLi reaction product, and Ru-BuLi reaction product were also claimed as

catalysts. The polymers were useful in the manufacture of tires, seals, films, and other products.

IT **2678-41-3**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for polymerization of butadiene with styrene)
RN 2678-41-3 HCAPLUS
CN Phenol, barium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ba

L53 ANSWER 55 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1969:68899 HCAPLUS
DOCUMENT NUMBER: 70:68899
TITLE: Phenoxides as transesterification catalysts
INVENTOR(S): Carlson, Otto K.; Price, John A.
PATENT ASSIGNEE(S): FMC Corp.
SOURCE: U.S., 2 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

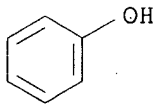
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3425997	A	19690204	US 1966-584970	19661007

PRIORITY APPLN. INFO.: US 1966-584970 19661007

AB Ethylene glycol (I) and di-Me terephthalate (II) are heated in the presence of Ca, Pb, or Zn phenoxide to increase the transesterification rate during the preparation of a prepolymer, comprising principally bis(2-hydroxyethyl) terephthalate, which is highly transesterified as indicated by its low CO2H content. The prepolymer is condensed to give poly(ethylene terephthalate) (III) having a high mol. weight, as indicated by a high intrinsic viscosity and m.p. Thus, 396 ml. I, 600 g. II, and 0.24 g. of a phenoxide were agitated and heated under N to 197° during 30 min. while MeOH distilled off, kept at 197° for 2 hrs., heated to 230° during 30 min., cooled, mixed (50 g.) with 0.02 g. Sb2O3, and agitated under N at 285°/0.05-0.1 mm. for 3 hrs. to give III. The III prepared with the 3 phenoxides had the following properties [phenoxide, half-time of the transesterification (min.), prepolymer CO2H content (meq./kg.), and polyester CO2H content (meq./kg.) and m.p. given]: Ca(OPh)2, 43, 1.6, 10.8, 265°; Pb(OPh)2, 20, 2.5, 11.0, 261°; Zn(OPh)2, 20, 6.2, 40.9, 265°.

IT **5793-84-0**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts, for transesterification in polyethylene terephthalate

manufacture)
RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

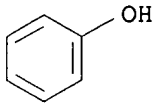
L53 ANSWER 56 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1969:68898 HCAPLUS
DOCUMENT NUMBER: 70:68898
TITLE: Poly(ethylene terephthalate) by direct esterification
INVENTOR(S): Carter, Mary E.; Price, John A.
PATENT ASSIGNEE(S): FMC Corp.
SOURCE: U.S., 2 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3425995	A	19690204	US 1966-575242	19660826

PRIORITY APPLN. INFO.: US 1966-575242 19660826

AB Direct esterification is carried out between ethylene glycol (I) and terephthalic acid (II) in the presence of a phenolate and the prepolymer formed is polycondensed in the presence of a catalyst to give poly-(ethylene terephthalate). Thus, a mixture of 84 g. II, 62 g. I, and 0.0113 g. of an alkali metal or alkaline earth phenolate was charged to a Fischer-Porter pressure assembly and flushed with N. The mixture temperature was raised to 260° under 60 psi. N pressure and a H2-O-I distillate was collected. When the solution was clear, the pressure was reduced to 1 atmospheric and excess I was distilled off. The low-mol.-weight prepolymer was condensed in vacuo for 4 hrs. at 282° in the presence of 0.04% Sb2O3 or Sb2S3 to give a high-mol.-weight polyester. The following results were obtained (phenolate, min. esterification time, condensation catalyst, intrinsic viscosity, and polymer m.p. given): -, 220, -, 0.36, 261°; -, 220, Sb2O3, 0.8, 250°; Ca(OPh)2, 150, Sb2O3, 0.99, 260°; Ca(OPh)2, 150, Sb2S3, 0.93, 262°; NaOPh, 135, Sb2O3, 0.65, 262°.

IT **5793-84-0**
RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts from antimony oxide and, for polymerization of ethylene glycol with terephthalic acid)
RN 5793-84-0 HCAPLUS
CN Phenol, calcium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Ca

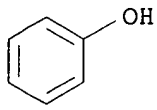
L53 ANSWER 57 OF 57 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:3006 HCAPLUS
DOCUMENT NUMBER: 66:3006
TITLE: Dialkyl tin oxides and their polymers
INVENTOR(S): Oakes, Vincent; Hutton, Ronald E.; Tonge, Brian L.
PATENT ASSIGNEE(S): Pure Chemicals Ltd.
SOURCE: Brit., 6 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1047389		19661102	GB	19631122
DE 1270556			DE	

AB The title compds. are prepared by reaction of tin with alkyl or alkenyl halides, with an organic phosphite, phosphine, sulfoxide, or sulfone, a tertiary amine, or a metal halide and an organic Lewis base as catalyst and hydrolyzing the resulting organotin compds. Bromides are preferred. Polymeric compds. are produced when dihalides are used. Thus, granulated Sn 59.4, ethylene dibromide (I) 94, Ph3PO3 (II) 15.4, and PhCl 50 g. were refluxed for 40 hrs. The solution was filtered and excess ethylene dibromide and PhCl were removed. The viscous poly(ethylenetin dibromide) was dissolved in alc. and hydrolyzed with alc. NaOH. The polymeric organotin oxide precipitated as a white powder. Other reactions were (halides and catalysts given): 1,3-dibromopropane (III), II; 1,5-dibromopentane (IV), II; I, Li and ethoxyethanol; IV, Na and BuOH; III, Cd and ethoxyethanol; III, Na and ethoxyethyl acetate; IV, Hg and II; IV, Mg(OPh)2 and II; 1,10-dibromodecane (V), Al tert-butoxide and Bu3N; ω-bromobutyric acid, Ph3P; 3-bromopropanol, Ph3P; p-(2-bromoethyl)benzaldehyde, Bu3N; 5-bromopentan-2-one, Bu3N; bis(2-bromoethyl) sulfide, Bu3N and LiBr; dimethyl 4-bromobutylamine, HCONMe2; ω-bromoacetonitrile, Ph3P; bis(2-bromoethyl) sulfone, VI; ethyl bromoacetate, Ph3P; 2-bromoethyl ethyl ether, Bu3N; N-(2-chloroethyl)phthalimide (VI), II; VI HCONMe2; bis(2-bromoethyl) ether (VII), Bu3N; IV and octyl bromide (VIII), II; V and VIII, trioctylamine; VIII, II; ω-dibromopoly(oxyethylene)ether, II, and Bu3N. These compds. are useful as intermediates in the preparation of poly(vinyl chloride) stabilizers, bactericides, fungicides, and molluscicides.

IT **7721-07-5**

RL: **CAT (Catalyst use)**; USES (Uses)
(catalysts from phenyl phosphite and, for polymerization of tin with alkyl halides)
RN 7721-07-5 HCAPLUS
CN Phenol, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●1/2 Mg

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L54 23 SEA FILE=REGISTRY ABB=ON PLU=ON (7721-07-5/BI OR 5793-84-0/BI OR 2678-41-3/BI OR 41157-58-8/BI OR 32664-67-8/BI OR 100842-25-9/BI OR 132931-21-6/BI OR 133208-60-3/BI OR 133208-61-4/BI OR 133208-63-6/BI OR 28675-72-1/BI OR 345629-59-6/BI OR 345629-60-9/BI OR 439910-53-9/BI OR 50910-68-4/BI OR 57570-79-3/BI OR 65851-31-2/BI OR 126755-33-7/BI OR 32666-20-9/BI OR 41157-60-2/BI OR 53389-47-2/BI OR 540743-45-1/BI OR 58973-87-8/BI)

FILE 'CAOLD' ENTERED AT 15:20:23 ON 13 JAN 2004
L55 16 S L54

L55 ANSWER 1 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA65:10410a CAOLD
TI petroleum fuel oil compns.
PA British Petroleum Co. Ltd.; Greatorex, R.; Witt, W. P.; Howells, H. E.
DT Patent

PATENT NO.	KIND	DATE
GB 1035819		

IT **5793-84-0**

L55 ANSWER 2 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA65:4052b CAOLD
TI interpolymer of ethylene oxide and a different 1,2-alkylene oxide
AU Bailey, Frederick E., Jr.; Hill, F. N.; Fitzpatrick, J. T.
PA Union Carbide Corp.
DT Patent

PATENT NO.	KIND	DATE
US 3256211		1966

IT 106-88-7 285-67-6 558-30-5 1192-31-0 1758-33-4
2556-53-8 **2678-41-3** 2855-19-8 2914-19-4 2914-23-0
3214-53-7 13043-25-9 13043-44-2 13222-40-7 21490-63-1
23321-74-6 30259-97-3

L55 ANSWER 3 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA63:11802d CAOLD

TI vinylidene chloride-based polymers (heat-stable)
PA Dynamit Nobel A.-G.
DT Patent

PATENT NO.	KIND	DATE
BE 647942		
FR 1401496		

IT 108-05-4 117-84-0 122-60-1 141-05-9 591-87-7
593-60-2 2224-15-9 2461-15-6 **2678-41-3** 28987-17-9
30259-97-3 31291-42-6 31291-43-7

L55 ANSWER 4 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA62:7053c CAOLD
TI pyrethrin-elastomer insecticidal compns.
AU Beerbower, Alan; Rudel, H. W.; Baumle, F. A.
PA Esso Research and Engineering Co.
DT Patent

PATENT NO.	KIND	DATE
US 3158535		1964

IT 2678-18-4 2678-19-5 **2678-41-3** 2785-09-3 2785-10-6
27323-19-9 27947-99-5

L55 ANSWER 5 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA60:14630f CAOLD
TI polymerization of vicinal epoxides
AU Bailey, Frederick E., Jr.; Hill, F. N.; Fitzpatrick, J. T.
PA Union Carbide Corp.
DT Patent

PATENT NO.	KIND	DATE
US 3100750		1963

IT 2556-53-8 **2678-41-3** 2914-19-4 2914-23-0 3214-53-7
13043-25-9 13043-44-2 13043-45-3 13043-46-4 13043-47-5
30259-97-3 92063-34-8 94845-60-0

L55 ANSWER 6 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA58:4577e CAOLD
TI porphyrin studies - (XXIV) stabilities of Mg chelates of porphyrins and chlorines
AU Corwin, Alsoph H.; Wei, P. E.
IT **7721-07-5**

L55 ANSWER 7 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA56:13095h CAOLD
TI polymers from monomeric epoxy compds.
AU Waddan, Dhafir Y.
PA Petrochemicals Ltd.
DT Patent

PATENT NO.	KIND	DATE
GB 875161		

IT 555-91-9 556-91-2 **7721-07-5** 15086-27-8 107661-99-4
107662-01-1

L55 ANSWER 8 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA56:1679f CAOLD
TI adsorption behavior of detergents in lubricating oil chromatography

AU Fujita, Minoru; Aoki, Y.
IT **5793-84-0**

L55 ANSWER 9 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA54:8046h CAOLD
TI effect of additives with different functional characteristics on the performance of motor oils
AU Druzhinina, A. V.; Filippov, V. F.; Tsiguro, T. A.
IT **28675-72-1**

L55 ANSWER 10 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:17488h CAOLD
TI effect of alkali detergent additives on the high-temperature oxidation of mineral oils
AU Vinner, G. G.; Ravikovich, A. M.; Tlyustangelova, M. V.
IT **2678-41-3** **5793-84-0**

L55 ANSWER 11 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:14488b CAOLD
TI effect of detergent and dispersant type additives on piston ring wear
AU Gorry, Lawrence J., Jr.
IT **5793-84-0**

L55 ANSWER 12 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA53:8616a CAOLD
TI Ca phenolates and their sulfurized derivs.
AU Kluge, Herman D.; Drake, K.
DT Patent
TI calcium phenolates and S derivs.
PA Texaco Inc.
DT Patent

PATENT NO.	KIND	DATE
PI US 2870134		1959

IT **5793-84-0**

L55 ANSWER 13 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA52:17693e CAOLD
TI lubricating-oil additive
AU Garbett, Thomas A.; Pegg, R. E.
PA Esso Research and Engineering Co.
DT Patent

PATENT NO.	KIND	DATE
PI GB 790504		

IT **28675-72-1 126755-33-7**

L55 ANSWER 14 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA52:15894d CAOLD
TI Ca additives for leaded gasolines
AU Hinkamp, James B.; Hirschler, D. A., Jr.; Irish, G. E.
DT Patent
TI gasoline additive
PA Ethyl Corp.
DT Patent

PATENT NO.	KIND	DATE

PI US 2834662 1958
PI US 2834663 1958
IT **7721-07-5** 14710-30-6

L55 ANSWER 15 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA51:15091h CAOLD
TI effect of additives on the adhesion of bitumen to minerals
AU Ambros, R. A.
IT **5793-84-0**

L55 ANSWER 16 OF 16 CAOLD COPYRIGHT 2004 ACS on STN
AN CA38:1402f CAOLD
TI A. Bessell, the discoverer of the first flotation process
AU Berg, Georg
TI C. L. Berthollet
AU Usanovich, M.
TI Julius R. Mayer and the discovery of the principle of conservation of energy
AU Schimank, H.
TI Julius Robert Mayer
AU Schwenkhagen, H.
IT **5793-84-0**

FILE 'USPATFULL' ENTERED AT 15:20:39 ON 13 JAN 2004
L56 90 S L54
L57 64 S L56 AND CATALY?

FILE 'REGISTRY' ENTERED AT 15:22:20 ON 13 JAN 2004
L58 1 S CHROMIUM/CN

FILE 'USPATFULL' ENTERED AT 15:22:35 ON 13 JAN 2004
L59 15 S (L58 OR CHROMIUM OR CR) AND L57

L59 ANSWER 1 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:235793 USPATFULL
TITLE: Use of additives for improved engine operation
INVENTOR(S): Van Leest, Peter, Rotterdam, UNITED KINGDOM
Caprotti, Rinaldo, Oxfordshire, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003163948	A1	20030904	
APPLICATION INFO.:	US 2003-258415	A1	20030417	(10)
	WO 2001-EP5487		20010514	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2000-11733	20000516

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Infeneum USA, Law Department, 1900 East Linden Avenue, P O Box 710, Linden, NJ, 07036-0710
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 1134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Engine operation is improved by means of detergent additives. An additive comprising, or obtainable by admixing, A or B or both

wherein: A is a metal-containing detergent, and B is a non metal-containing detergent, is used in an internal combustion engine lubricated by means of a separate lubricating oil system, to enhance the properties of the lubricating oil of the engine through entrainment therein the combustion chamber during operation of the engine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 2 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:188758 USPATFULL
TITLE: **Catalytic** composition and process for oligomerizing ethylene, in particular to1-hexene
INVENTOR(S): Drochon, Sebastien, Rueil Malmaison, FRANCE
Guibert, Severine, Bougival, FRANCE
Saussine, Lucien, Croissy Sur Seine, FRANCE
PATENT ASSIGNEE(S): Institut Francais du Petrole, Rueil Malmaison Cedex, FRANCE (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003130551	A1	20030710	
APPLICATION INFO.:	US 2002-309336	A1	20021204	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 2001-16006	20011210

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 364
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A **catalytic** composition for oligomerizing ethylene, in particular to 1-hexene, is obtained by mixing at least one **chromium** carboxylate characterized in that it also contains a free carboxylic acid in a set proportion, with at least one aryloxy compound of an element M selected from the group formed by magnesium, calcium, strontium and barium, with general formula M(RO).sub.2-nX.sub.n in which RO is an aryloxy radical containing 6 to 80 carbon atoms, X is a halogen atom or a hydrocarbyl radical containing 1 to 30 carbon atoms and n is a whole number that can take the values 0 or 1, and with at least one hydrocarbylaluminum compound selected from the group formed by tris(hydrocarbyl)-aluminum compounds, chlorinated or brominated hydrocarbylaluminum compounds and aluminoxanes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 3 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2001:161013 USPATFULL
TITLE: **Catalytic** composition and a process for oligomerizing ethylene, in particular to 1-hexene
INVENTOR(S): Commereuc, Dominique, Meudon, France
Drochon, Sebastien, Rueil Malmaison, France
Saussine, Lucien, Croissy sur Seine, France

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2001023281	A1	20010920	
APPLICATION INFO.:	US 2000-745441	A1	20001226	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1999-16509	19991224

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., Arlington Courthouse Plaza I, 2200 Clarendon Blvd., Suite 1400, Arlington, VA, 22201
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 345
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A **catalytic** composition is obtained by mixing at least one **chromium** compound with at least one aryloxy compound of an element M selected from the group formed by magnesium, calcium, strontium and barium, with general formula M(RO).sub.2-nX.sub.n, where RO is an aryloxy radical containing 6 to 80 carbon atoms, X is a halogen or a hydrocarbyl radical containing 1 to 30 carbon atoms and n is a whole number that can take values of 0 to 2, and with at least one aluminum compound selected from hydrocarbylaluminum compounds (tris(hydrocarbyl)-aluminum, chlorinated or brominated hydrocarbylaluminum compounds) and aluminoxanes. The **catalytic** composition can be used in an ethylene oligomerization process, in particular to produce 1-hexene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 4 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2000:47397 USPATFULL
TITLE: Oxidation of mercaptans to disulfides
INVENTOR(S): Matson, Michael S., Bartlesville, OK, United States
Swindell, Harold J., Bartlesville, OK, United States
PATENT ASSIGNEE(S): Phillips Petroleum Company, Bartlesville, OK, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6051740		20000418	
APPLICATION INFO.:	US 1998-210034		19981211	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Geist, Gary
ASSISTANT EXAMINER: Vollano, Jean F
LEGAL REPRESENTATIVE: Richmond, Hitchcock, Fish & Dollar
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 942
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process which can be used to produce an organic disulfide is

provided. The process comprises contacting a mercaptan in the presence of an oxygen-containing fluid, a **catalyst**, optionally a cocatalyst, and further optionally a solvent or a surfactant or combination of a solvent and surfactant under a condition sufficient to oxidize the mercaptan to an organic disulfide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 5 OF 15 USPATFULL on STN

ACCESSION NUMBER:	1999:43531 USPATFULL		
TITLE:	Substantially metal free synthetic power transmission fluids having enhanced performance capabilities		
INVENTOR(S):	Srinivasan, Sanjay, Midlothian, VA, United States Smith, David W., Richmond, VA, United States		
PATENT ASSIGNEE(S):	Ethyl Corporation, Richmond, VA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5891786		19990406
APPLICATION INFO.:	US 1995-371722		19950112 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Howard, Jacqueline V.		
LEGAL REPRESENTATIVE:	Rainear, Dennis H.		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1273		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The fluids have an oil-soluble boron content of about 0.001 to about 0.1%, an oil-soluble phosphorus content of about 0.005 to about 0.2%, and either no metal additive content or an oil-soluble metal content as one or more metal-containing additives of no more than about 100 ppm. Included in the fluids are: (a) at least 70 wt % of hydrogenated poly-α-olefin oligomer fluid with a viscosity in the range of 2-6 cSt at 100° C.; (b) 2-20 wt % of acrylic viscosity index improver; (c) 4-25 wt % of oil-soluble dialkyl ester of a C.sub.4 to C.sub.14 α,ω-dicarboxylic acid with a pour point of -45° C. or lower; (d) ashless dispersant; (e) friction modifier; and (f) oil-soluble inhibitors. The components are such that the fluid has (i) a KV of at least 6.8 cSt at 100° C., (ii) a BV of 15,000 cP or less at -40° C., (iii) a KV at 100° C. of at least 6.0 cSt after 4 hours and at least 5.0 cSt after 20 hours in the Volkswagen taper roller bearing shear stability test. The fluids possess other excellent performance properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 6 OF 15 USPATFULL on STN

ACCESSION NUMBER:	97:123161 USPATFULL
TITLE:	Lubricants with enhanced low temperature properties
INVENTOR(S):	Srinivasan, Sanjay, Chesterfield, MO, United States

PATENT ASSIGNEE(S): Ethyl Corporation, Richmond, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5703023		19971230	
APPLICATION INFO.:	US 1995-561553		19951121	(8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-161903, filed on 3 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-816351, filed on 24 Dec 1991, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: McAvoy, Ellen M.
LEGAL REPRESENTATIVE: Rainear, Dennis H., Hamilton, Thomas
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 1941
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Lubricants having a Brookfield viscosity at -40° C. equal to or below 20,000 cP (preferably 15,000 or less) are formed from blends composed of a major amount of mineral oil in the range of about 90N to about 140N; and minor amounts of poly-α-olefin oligomer (PAO) formed from 1-alkene of 6 to 20 carbon atoms and having a kinematic viscosity of about 2 cSt at 100° C.; and vinylaromatic-maleic ester polymeric viscosity index improver. Synergistic low temperature viscometric properties are exhibited by typical compositions of this type.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 7 OF 15 USPATFULL on STN
ACCESSION NUMBER: 97:49795 USPATFULL
TITLE: Method for the preparation of 2 hydroxybenzonitrile
INVENTOR(S): Levin, Daniel, Manchester, United Kingdom
PATENT ASSIGNEE(S): Zeneca Limited, London, England (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5637750		19970610	
	WO 9419317		19940901	
APPLICATION INFO.:	US 1995-507241		19950818	(8)
	WO 1994-GB277		19940211	
			19950818	PCT 371 date
			19950818	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1993-3334	19930219

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Richter, Johann
ASSISTANT EXAMINER: Sackey, Ebemezer
LEGAL REPRESENTATIVE: Cushman Darby & Cushman IP Group Pillsbury Madison & Sutro, L.L.P.
NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1
LINE COUNT: 800
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for the preparation of a 2-hydroxybenzonitrile which comprises reacting hydroxylamine with a 2-hydroxyarylaldehyde which is at least partially in the form of a salt and/or complex of a metal of Group II, Group III, Group IVA or Group VIA of the Periodic Table and dehydrating the 2-hydroxyarylaldoxime so formed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 8 OF 15 USPATFULL on STN
ACCESSION NUMBER: 96:108612 USPATFULL
TITLE: Power transmission fluids having enhanced performance capabilities
INVENTOR(S): Srinivasan, Sanjay, Midlothian, VA, United States
Smith, David W., Richmond, VA, United States
PATENT ASSIGNEE(S): Ethyl Corporation, Richmond, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5578236		19961126	
APPLICATION INFO.:	US 1994-343289		19941122	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Medley, Margaret
LEGAL REPRESENTATIVE: Rainear, Dennis H.
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 1162
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Power transmission fluids are described that have a Brookfield viscosity of 13,000 cP or less at -40° C., a viscosity of at least 2.6 mPa.multidot.s at 150° C. in the ASTM D-4683 method, and a viscosity of at least 6.8 cSt at 100° C. after 40 cycles in the FISST of ASTM D-5275. This is achieved by use of particular base oil and additive components in specified proportions. Evaluations to date indicate that the compositions evaluated possess a combination of performance properties deemed necessary by an original equipment manufacturer for a new generation of electronically controlled automatic transmissions equipped with torque converter clutches capable of operating in a continuous slip mode.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 9 OF 15 USPATFULL on STN
ACCESSION NUMBER: 94:95176 USPATFULL
TITLE: Ashless or low-ash synthetic base compositions and additives therefor
INVENTOR(S): Chrisope, Douglas R., St. Louis, MO, United States
Hartley, Rolfe J., St. Louis, MO, United States
PATENT ASSIGNEE(S): Ethyl Petroleum Additives, Inc., Richmond, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5360562		19941101	
APPLICATION INFO.:	US 1993-32821		19930315	(8)

DISCLAIMER DATE: 20090218
RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-817047, filed on 6 Jan 1992, now abandoned which is a continuation of Ser. No. US 1990-597493, filed on 10 Oct 1990, now patented, Pat. No. US 5089156
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Johnson, Jerry D.
LEGAL REPRESENTATIVE: Sieberth, John F.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 1242
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An ashless or low-ash oleaginous liquid composition comprising a major amount of hydrogenated poly-α-olefin oligomer fluid having a viscosity in the range of about 2 to about 10 cSt at 100° C., and minor amounts of at least the following: A) hydrogenated poly-α-olefin oligomer fluid having a viscosity in the range of about 40 to about 120 cSt at 100° C.; and B) antiwear/extreme pressure agent selected from phosphorus-containing ashless dispersant, boron-containing ashless dispersant, and phosphorus- and boron-containing ashless dispersant. Compositions of this type can be formed having excellent high and low temperature viscosity characteristics and excellent shear stability. To this end, the preferred compositions are devoid or substantially devoid of conventional polymeric high molecular weight viscosity index improvers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 10 OF 15 USPATFULL on STN
ACCESSION NUMBER: 92:46763 USPATFULL
TITLE: Coal solubilization
INVENTOR(S): Morgan, David L., Transvaal, South Africa
PATENT ASSIGNEE(S): National Energy Council, Pretoria, South Africa (non-U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5120430		19920609	
APPLICATION INFO.:	US 1990-589606		19900928	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	ZA 1989-7388	19890928
	ZA 1990-6211	19900807

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Clingman, A. Lionel
ASSISTANT EXAMINER: DiNunzio, Mary C.
LEGAL REPRESENTATIVE: Cushman, Darby & Cushman
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 215

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of solubilizing organic material in a coal includes the steps of contacting the coal with a medium comprising an organic solvent and a strong base or phenoxide reactively associated with the solvent. The solvent may be an aprotic dipolar solvent such as N-methyl pyrrolidone. The strong base may be sodium or potassium hydroxide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 11 OF 15 USPATFULL on STN

ACCESSION NUMBER: 92:12616 USPATFULL

TITLE: Ashless or low-ash synthetic base compositions and additives therefor

INVENTOR(S): Chrisope, Douglas R., St. Louis, MO, United States
Hartley, Rolfe J., St. Louis, MO, United States

PATENT ASSIGNEE(S): Ethyl Petroleum Additives, Inc., St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5089156		19920218	
APPLICATION INFO.:	US 1990-597493		19901010	(7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hearn, Brian E.
ASSISTANT EXAMINER: Nuzzolillo, Maria
LEGAL REPRESENTATIVE: Sieberth, John F.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 1240

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An ashless or low-ash oleaginous liquid composition comprising a major amount of hydrogenated poly-α-olefin oligomer fluid having a viscosity in the range of about 2 to about 10 cSt at 100°C., and minor amounts of at least the following: A) hydrogenated poly-α-olefin oligomer fluid having a viscosity in the range of about 40 to about 120 cSt at 100°C.; and B) antiwear/extreme pressure agent selected from phosphorus-containing ashless dispersant, boron-containing ashless dispersant, and phosphorus- and boron-containing ashless dispersant. Compositions of this type can be formed having excellent high and low temperature viscosity characteristics and excellent shear stability. To this end, the preferred compositions are devoid or substantially devoid of conventional polymeric high molecular weight viscosity index improvers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 12 OF 15 USPATFULL on STN

ACCESSION NUMBER: 89:58793 USPATFULL

TITLE: Process for producing a **catalyst** component for polymerization of olefins

INVENTOR(S): Tachikawa, Mamoru, Saitama, Japan
Sakuma, Masato, Saitama, Japan
Ueki, Satoshi, Saitama, Japan
Imai, Chihiro, Kanagawa, Japan

	Makishima, Tokuo, Saitama, Japan
PATENT ASSIGNEE(S):	Toa Nenryo Kogyo K.K., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4849483		19890718	
APPLICATION INFO.:	US 1987-39496		19870416	(7)
DISCLAIMER DATE:	20030617			
RELATED APPLN. INFO.:	Division of Ser. No. US 1985-802660, filed on 27 Nov 1985, now patented, Pat. No. US 4686199			

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-251741	19841130

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Garvin, Patrick P.
LEGAL REPRESENTATIVE:	Kurtzman, M. B., Hunt, J. F.
NUMBER OF CLAIMS:	5
EXEMPLARY CLAIM:	1
LINE COUNT:	603

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for producing a **catalyst** component for polymerization of olefins which comprises contacting (a) a metal oxide with (b) a magnesium alkoxide, contacting the resulting contact product with (c) a halogen-containing compound, and finally contacting the resulting contact product with (d) a titanium compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER:	87:56892 USPATFULL
TITLE:	Process for producing a **catalyst** component for polymerization of olefins
INVENTOR(S):	Tachikawa, Mamoru, Saitama, Japan Sakuma, Masato, Saitama, Japan Ueki, Satoshi, Saitama, Japan Imai, Chihiro, Kanagawa, Japan Makishima, Tokuo, Saitama, Japan
PATENT ASSIGNEE(S):	Toa Nenryo Kogyo Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4686199		19870811	
APPLICATION INFO.:	US 1985-802660		19851127	(6)
DISCLAIMER DATE:	20021001			

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-251741	19841130

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Garvin, Patrick P.
LEGAL REPRESENTATIVE:	Kurtzman, M. B.
NUMBER OF CLAIMS:	10

EXEMPLARY CLAIM: 10
LINE COUNT: 661
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for producing a **catalyst** component for polymerization of olefins which comprises contacting (a) a metal oxide with (b) a magnesium alkoxide, contacting the resulting contact product with (c) a halogen-containing compound, and finally contacting the resulting contact product with (d) a titanium compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 14 OF 15 USPATFULL on STN
ACCESSION NUMBER: 84:33266 USPATFULL
TITLE: Process for producing o-methylated phenols
INVENTOR(S): Inoue, Yasuhiko, Niihama, Japan
Nishizaki, Tadao, Niihama, Japan
Taguchi, Satoshi, Ibaraki, Japan
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Osaka, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4454357		19840612	
APPLICATION INFO.:	US 1982-411806		19820826	(6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lone, Werren B.
LEGAL REPRESENTATIVE: Stevens, Davis, Miller & Mosher
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 444
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for producing o-methylated phenols useful as raw materials for resins and medicines in high yields comprising reacting methanol with phenols in the presence of a **catalyst** containing at least one compound selected from the group consisting of (1) magnesium oxide, manganese oxide and iron oxide which are all pre-treated with phenols and (2) magnesium phenolate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L59 ANSWER 15 OF 15 USPATFULL on STN
ACCESSION NUMBER: 81:8102 USPATFULL
TITLE: Process and **catalyst** components for the polymerization and the copolymerization of olefins
INVENTOR(S): Delbouille, Andre, Brussels, Belgium
Derroitte, Jean L., Brussels, Belgium
PATENT ASSIGNEE(S): Solvay & Cie, Brussels, Belgium (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4250284		19810210	
APPLICATION INFO.:	US 1975-552335		19750224	(5)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1972-313946, filed on

11 Dec 1972, now abandoned which is a continuation of Ser. No. US 1969-889737, filed on 31 Dec 1969, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1969-706	19690106
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Smith, Edward J.	
LEGAL REPRESENTATIVE:	Pennie & Edmonds	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
LINE COUNT:	862	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymerization and copolymerization is carried out in the presence of an improved transition metal based **catalyst**. The **catalyst** is obtained by activating with an organometallic compound, the solid product which results from the reaction of a halogen containing transition metal compound with an alkoxy metal compound of the formula X.sub.m-n M(OR).sub.n wherein M is at least one metal selected from the elements of Groups Ia, IIa, IIb, IIIa and VIIb of the Periodic Table, X is a monovalent inorganic radical, R is a monovalent hydrocarbon radical, m is the valence of M and n is an integer such that $1 \leq n \leq m$.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'HOME' ENTERED AT 15:23:23 ON 13 JAN 2004

-Named compds claim 4

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     (FILE 'REGISTRY' ENTERED AT 15:09:47 ON 14 JAN 2004)
=> e "bis(2,6-diphenylphenoxy)magnesium"/cn 5
E1            1     BIS(2,6-DIPHENYLPHENOLATO)TRIS(TRIMETHYLSILYLMETHYL)TA
                    NTALUM/CN
E2            1     BIS(2,6-DIPHENYLPHENOXY)ISOBUTYLALUMINUM/CN
E3            0 --> BIS(2,6-DIPHENYLPHENOXY)MAGNESIUM/CN
E4            1     BIS(2,6-DIPHENYLPHENOXY)TETRACHLOROTUNGSTEN/CN
E5            1     BIS(2,6-DIPHENYLPHENOXY)TITANIUM DICHLORIDE/CN

=> e "bis(2-tert-butyl-6-phenylphenoxy)magnesium"/cn 5
E1            1     BIS(2-TERT-BUTYL-6-METHYLPHENOXY)TITANIUM DICHLORIDE/C
                    N
E2            1     BIS(2-TERT-BUTYL-6-METHYLPHENYL) FLUOROPHOSPHITE/CN
E3            1 --> BIS(2-TERT-BUTYL-6-PHENYLPHENOXY)MAGNESIUM/CN
E4            1     BIS(2-TERT-BUTYL-6-TERT-AMYLPHENYL)BUTYL BORONATE/CN
E5            1     BIS(2-TERT-BUTYLAZO-2-PROPYL) SULFIDE/CN

=> s e3
L1            1 "BIS(2-TERT-BUTYL-6-PHENYLPHENOXY)MAGNESIUM"/CN

=> d ide


L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   345629-60-9  REGISTRY
CN   [1,1'-Biphenyl]-2-ol, 3-(1,1-dimethylethyl)-, magnesium salt (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN   Bis(2-tert-butyl-6-phenylphenoxy)magnesium
MF   C16 H18 O . 1/2 Mg
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL
CRN  (2416-98-0)
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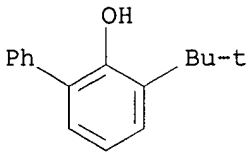

●1/2 Mg

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              2 REFERENCES IN FILE CA (1907 TO DATE)
              2 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> e "bis(2,4-di-tert-butyl-6-phenylphenoxy)magnesium"/cn 5
E1            1     BIS(2,4-DI-TERT-BUTYL-6-METHYLPHENOXY)ETHYLALUMINUM/CN
E2            1     BIS(2,4-DI-TERT-BUTYL-6-METHYLPHENYL) ETHYL PHOSPHITE/
                    CN
E3            0 --> BIS(2,4-DI-TERT-BUTYL-6-PHENYLPHENOXY)MAGNESIUM/CN
E4            1     BIS(2,4-DI-TERT-BUTYLPHENOXY)METHYLALUMINUM/CN
E5            1     BIS(2,4-DI-TERT-BUTYLPHENYL) 3-PHENYLPHENYLPHOSPHONITE
```

Searcher : Shears 571-272-2528

/CN

FILE 'HCAPLUS' ENTERED AT 15:11:30 ON 14 JAN 2004
L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON "BIS(2-TERT-BUTYL-6-PHENYLPHENOXY)MAGNESIUM"/CN
L2 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L1
L3 154 SEA FILE=HCAPLUS ABB=ON PLU=ON 6(W)(DIPHENYLPHENOXY? OR PHENYLPHENOXY? OR (PHENYL OR DIPHENYL OR PH)(W)PHENOXY?)
L4 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L3(S)BIS
L5 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L4(S)(MG OR MAGNESIUM)
L6 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR L5

L6 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:456219 HCAPLUS
DOCUMENT NUMBER: 139:38258
TITLE: Catalytic composition and improved procedure for oligomerization of ethylene, in particular to 1-hexene
INVENTOR(S): Drochon, Sebastien; Guibert, Severine; Saussine, Lucien
PATENT ASSIGNEE(S): Institut Francais Du Petrole, Fr.
SOURCE: Fr. Demande, 13 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2833191	A1	20030613	FR 2001-16006	20011210
US 2003130551	A1	20030710	US 2002-309336	20021204
DE 10256926	A1	20030618	DE 2002-10256926	20021205
NL 1022098	A1	20030611	NL 2002-1022098	20021206
CN 1424148	A	20030618	CN 2002-154099	20021210

PRIORITY APPLN. INFO.: FR 2001-16006 A 20011210
OTHER SOURCE(S): MARPAT 139:38258

AB A catalytic composition for the oligomerization of ethylene, in particular to 1-hexene, is obtained by mixing of ≥1 carboxylate of chromium having free carboxylic acid-Cr ratio (1-2.5):1 with (A) ≥1 aryloxy compound of an element M chosen from a group formed by magnesium, calcium, strontium, barium, of general formula: M(RO)2-nXn in which RO is a radical aryloxy containing from 6 to 80 carbon atoms, X is an atom of halogen or a hydrocarbyl radical containing from 1 to 30 atoms of carbon and n is zero or 1 and (B) ≥1 hydrocarbylaluminum compound chosen from hydrocarbylaluminum, chlorinated or brominated hydrocarbylaluminum, and aluminoxanes. This catalyst provides for production of 1-hexene with decreased formation of polymer byproduct.

IT **345629-60-9, Bis(2-tert-butyl-6-phenylphenoxy)magnesium**
RL: CAT (Catalyst use); USES (Uses)
(catalytic composition for trimerization of ethylene to 1-hexene with decreased polymer byproduct)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:471993 HCAPLUS
DOCUMENT NUMBER: 135:62984
TITLE: Catalytic composition and process for the oligomerization of ethylene primarily into 1-hexene
INVENTOR(S): Commereuc, Dominique; Drochon, Sebastien; Saussine, Lucien
PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.
SOURCE: Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1110930	A1	20010627	EP 2000-403477	20001211
EP 1110930	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2802833	A1	20010629	FR 1999-16509	19991224
FR 2802833	B1	20020510		
JP 2001219071	A2	20010814	JP 2000-392368	20001225
US 2001023281	A1	20010920	US 2000-745441	20001226
ZA 2001002903	A	20021009	ZA 2001-2903	20010409

PRIORITY APPLN. INFO.: FR 1999-16509 A 19991224
OTHER SOURCE(S): MARPAT 135:62984
AB A catalytic composition for the trimerization of ethylene into 1-hexene comprises: (a) a chromium compound [e.g., chromium tris(2-ethylhexanoate)]; (b) a Group IIA metal (un)substituted aryloxide [e.g., **bis**(2,**6-diphenylphenoxy**)**magnesium**]; and (c) a hydrocarbylaluminum compound (e.g., triethylaluminum) or a bromo- or chlorohydrocarbylaluminum compound, and the aluminoxanes.
IT **345629-60-9**
RL: CAT (Catalyst use); USES (Uses)
(in trimerization catalysts containing a hydrocarbylaluminum compound and a chromium compound for the conversion of ethene into 1-hexene)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(FILE 'BIOSIS, WPIDS, JICST-EPLUS, JAPIO, CBNB, CIN, CASREACT' ENTERED AT 15:18:01 ON 14 JAN 2004)
L7 0 S L1
L8 1 S L5

L8 ANSWER 1 OF 1 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-620400 [59] WPIDS
DOC. NO. CPI: C2003-169298
TITLE: A catalytic composition for the oligomerization of ethylene containing a chromium carboxylate containing free carboxylic acid, an aryloxy compound of a metal and a hydrocarbyl aluminum compound.

DERWENT CLASS: A17 E12
INVENTOR(S): DROCHON, S; GUIBERT, S; SAUSSINE, L
PATENT ASSIGNEE(S): (INSF) INST FRANCAIS DU PETROLE
COUNTRY COUNT: 5
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
FR 2833191	A1	20030613	(200359)*		13
CA 2414399	A1	20030610	(200359)	FR	
DE 10256926	A1	20030618	(200359)		
US 2003130551	A1	20030710	(200359)		
CN 1424148	A	20030618	(200361)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
FR 2833191	A1	FR 2001-16006	20011210
CA 2414399	A1	CA 2002-2414399	20021209
DE 10256926	A1	DE 2002-10256926	20021205
US 2003130551	A1	US 2002-309336	20021204
CN 1424148	A	CN 2002-154099	20021210

PRIORITY APPLN. INFO: FR 2001-16006 20011210
AN 2003-620400 [59] WPIDS
AB FR 2833191 A UPAB: 20030915
NOVELTY - A catalytic composition obtained by mixing a chromium carboxylate also containing a defined proportion of free carboxylic acid, an aryloxy compound of magnesium, calcium, strontium or barium and a hydrocarbyl aluminum compound.

DETAILED DESCRIPTION - A catalytic composition obtained by mixing a chromium carboxylate also containing a defined proportion of free carboxylic acid, an aryloxy compound of magnesium, calcium, strontium or barium and a hydrocarbyl aluminum compound. The aryloxy compound is of Formula (I):

M(RO)2-nXn (I)

M = Mg, Ca, Sr, Ba;
RO = 6-80C aryloxy radical;
X = H, 1-30C hydrocarbyl;
n = integer 0 or 1.

The hydrocarbyl aluminum compound is a tris(hydrocarbyl)aluminum, or a chlorinated or brominated compound of hydrocarbylaluminum of Formula AlR'mY3-m (II), or an alumoxane.

R' = 1-6C hydrocarbyl;
Y = Cl, Br;
m = 1-3

An INDEPENDENT CLAIM is included for a method of oligomerizing ethylene using the claimed catalytic composition.

USE - The catalyst is used in the preparation of ethylene oligomers used in the preparation of linear low density polyethylene.

ADVANTAGE - The catalyst is more selective for hexene-1 and the amount of polymer by product is greatly reduced.
Dwg.0/0

FILE 'HOME' ENTERED AT 15:19:59 ON 14 JAN 2004